NEAR EAST UNIVERSITY

Faculty of Engineering

Department of Computer Engineering

INTERACTIVE WEB PAGE DESIGN

Graduation Project
COM-400

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To all of them, my love and respect

ABSTRACT

The aim of my project is to design a website that user can share their views on any topic and submit their massages.

The web page.. starting frame simple mange to complex scripting languages. The first thing in my website is that only registered users can share their ideas and submit messages.

Ifthe user is not registered, a new user can be created instantly and all this is done in my project using an Active Severe Pages.

Similarly, many pages based on ASP that make my project on website attractive like sending new massage, registering admin login, Quiz' s.
We can make our website by potting ASP page and complex Java Script,

TABLE OF CONTANTS

INTRODUCTION

The Hyper Tex.t Madrup Language (HTML), Active server page (ASP), and Active Data Objects (ADO) are the main - field ofWeb designing.

The World Wide Web (www) work by Web pages, Web information is stored in documents called Web pages, These are files stored on computers called Web servers. Web clients Computers reading the Web pages are called Web clients. Web clients view the pages with a program called a Web browser.

JavaScript was designed to add lmeractivity to HTML page, and the JavaScript is used in the web page to improve the design, validate forms or data, and much more. JavaScript was developed by Netscape and is the most popular scripting language on the Intemet.

The ADO Connection Object is used to create art epen connection to a data source. Through this connection, you can access and manipulate a database.

Chapter Oue, describes what the World Wide Web. And the difference between a Web browser and a Web server. And also what HTML, and how HTML "markııp tags" are used to format a Web page, and grves you seme basic guidelines for using HTML tags (paragraph, heading, image, forms, and tables, ect...).

Chapter Two. describes an Aetive Server Page (ASP) fundamenıal and has an explanation about ASP files and how ASP works. Also this chapter describes the relation between ASP and HTML, and ASP variable which brief explanation about Session variables and Application variables.

Chapter Three, introduces JavaScript discusses some of the fundamental concepts of JavaScript, How to Put a JavaScript into an HTML Page, Where to put the JavaScript in the head seetion or in the body section; and provides basic examples,

Chapter Foar, describes the database and database management system (DBMS), and also we have eovered some of the basies for an Microsoft Access database and database objects.

Chapter Flve, describes an ActiveX Data Object (ADO), ADO database connection, and how an ODBC conneetion to the Microsoft Access database,

Chapter Six. is the last ehapter of the projeet, to describes the web page techniques, and how we can run ASP on the computer (machine).

CHAPTER 1. HYPER TEXT MARKUP LANGUAGE (HTML)

1.1 Introducnon

Hyper Text Markıp Language (HTML) used to create web pages. Every web page has a basic structure; there are titles, headings, paragraphs, graphics and maybe even an itemized list of entries.

HTML uses a defined set of standards. All you need to do is use your favorite web editor and create a document with these labeled elements.

1.1.1 What is an HTML File?

- HTML stands for Hyper Text Markup Language
- An HTML file is a text file containing small mark:uptags
- The markup tags tell the Web browser how to display the page
- An HTML file musthave an htm erbtmlfile extension
- An HTML file can be created using a simple text editor

1.2 HTML And The Wo:rld Wide Web

1.2.1 What is the World Wide Web?

- The World Wide Web (WWW) is most often called the Web.
- The Web is a network of computers all over the world.
- All the computers in the Web can communicate with each other,
- All the computers use a communication standard called HTTP.

1.2.2 How does the WWW work?

- Web information is stored in documents called Web pages.
- Web pages are files stored on computers called Web servers,
- Computers reading the Web pages are called Web clients.
- Web clients view the pages with a program called a Web browser.

1.2.3 How does the browser fetch the pages?

- A browser fetches a Web page from a server by a request.
- A request is a standard HTTP request containing a page address.

1.2.4 How does tfie browser display the pages?

- All Web pages contain instructions for display
- The browser displays the page by reading these instructions.
- The mosrcommon display instructions are called HTML tags,
- HTML tags Iook like this <p>This is a Paragraph</p>.

1.3 HTML Elements

HTML documents are text files made up of HTML elements and HTML elements are defined using HTML tags.

1.3.1 HTML Tags

- HTML tags are used to mark-up HTML elements
- HTML tags are surrounded by the two charaeters < and >
- The surrounding eharaeters are called angle brackets
- HTML tags normally come in pairs like <b> and </b>
- The first tag in a pair is the start tag, the second tag is the end tag
- The text between the start and end tags is the element content
- HTML tags are not case sensitive, <b> means the same as <B>

1.3.2 Tag Attributes

Tags can have attributes. Attributes can provide additional information about the HTML elements on your page.

This tag defines the body element of your HTML page: <body>. With an added bgcolor attribute, you can tell the browser that the background color of your page should be red, like this: <body bgcolor="red">.

This tag defines an HTML table: <table>. With an added border attribute, you can tell the browser that the table should have no borders: <table border="O">

- Attributes always come in name/value pairs like this: name="value".
- Attributes are always added to the start tag of an HTML element.

1.4 Bask HTML Tags

The important tags in HTML are tags that define headings, paragraphs and line breaks.

Tag	Description
<html>	Defines an HTML document
<body>	Defines the document's body
<hl>To<h6>	Oefmes header 1 to header 6
<p>	Defines a paragraph
<br>	Inserts a single line break
<hr>	Defines a horizontal rule
<! -- -->	Defines a comment

1.4.1 Headtngs

Headings are defined with the <hl> to <h6> tags. <hl> defines the largest heading. <h6> defines the smallest heading,

```
<hl>This  is a heading</hl>
<h2>This is a heading</h2>
<h3>This is a heading</h3>
<h4>This is a heading</h4>
<h5>This is a heading</h5>
<h6>This is a heading</h6>
```

HTML automatically adds an extra blank line before and after a heading.

1.4.2 Paragraphs

Paragraphs are defined with the <p> tag.

```
<p>This is a paragraph</p>
<p>This is another paragraph</p>
```

HTML automatically adds an extra blank tine before and after a paragraph.

1.4.3 Line Breaks

The <br> tag is used when you want to end a line, but don't want to start a new paragraph. The <br> tag forces a Iine break wherever you place it.

The <br> tag is an empty tag. it has no closing tag,

1.4.4 Comments in HTML

The comment tag is used to insert a comment in the H1ML source code. A comment will be ignored by the browser. You can use comments to explain your code, which can help you when you edit the source code at a later date.

<!-- This is a co~men,:~~>

Note that you need an exclamation point after.the opening bracket, but not before the closing bracket.

1.5 HTML Charaeter Entities

Some characters have a special meaning in HTML,. like the less than sign (<) that defines the start of an HTML tag. If we want the browser to actually display these characters we must insert character entities ·in the HTML source,

A character entity has three parts: an ampersand (&), an entity name or a # and an entity mımber, and finally a semicolon (;).
To display a less than sign in an HTML document we must write: &lt; or &#60;
The advantage of using a name instead of a number is that a name is easier to remember. The disadvantage is that not all browsers support the newest entity names, while the support for entity numbers is very good in almost all browsers.

Nete: that the entities are case sensitive,

1.5.1 Non-breaking Spaee

The most common character entity in HTML is the non-breaking space, Normally HTML will truncate spaees in your text, If you write 10 spaces in your text H1ML will remove 9 of th.em. To add spaces to your text, use the &nbsp; eharacter entity.

1.5.1 The Most Common Character Entities;

Result	Description	EntityName	Entity Number
<	less than	&lt;	&#60;
>	greater than	&gt;	&#62;
&	ampersand	&amp;	&#38;
"	quotation mark	&quot;	&#34;
	apostrophe	&apos; (does not work in IE)	&#39;

1.6 HTML Links

HTML uses a hyperlink to link to another document on the Web.HTML Links uses the <a> (anchor) tag to create a link to another document.

'An anchorcan point to any resource on the Web: an HTML page, an image, a sound file, a movie, ete.

The syntax of creating an anchor:

```
<a hret:::url"> Text t0 be displayed</a>
```

1.6.1 The Href Attribute

The href attribute is used to address the doeument to link to, and the words between the open and close of the anchor tag will be displayed as a hyperlink.

1.6.2 The Target Attribute

With the target attribute, you can define where the Iinked document will be opened.(new page, main frame ,ect).

The line below wiU open the docuınent in a new browser window:

```
<a href="url" arget="_blank"> Text to be displayed</a>
```

1.6.3 Link an E-Mail

The reference will connect the user to local mail program to send a mail to the given mail address.

```
<a href="ınailto:   gaith1983@yahoo.com">
```

1.7 HTML Frames

With frames, you can display more than one HTML document in the same browser window. Each HTML document is called a frame, and each frame is independent of the others,

The disadvantages of using frames are:

- The web developer must keep track of more HTML documents
- It is difficult to print the entire page

1.7.1 The Frameset Tag

- The <frameset> tag defines how to divide the window into frames
- Each frameset defines a set of rows or columns
- The values of the rows/columns indicate the amount of screen area eaeh row/eolumn will occupy

1.7.2 The Frame Tag

The <frame> tag de:fineswhat HTML document to put into eaeh frame. In the example below we have a frameset with two coluınns. The first column is set to 25% of the width of the browser window, The second column is set to 75% of the width of the browser window. The HTML document "frame_a.htm" is put into the first cohımn; and the HTML document "frame, b.htın" is put into the second column:

```
<frameset cols="25%,75%">
  <frame src="frame  a.htm">
  <frame src="frame_b.htm">
</frameset>
```

Baste Notesı If a frame has visible borders, the user can resize it by dragging the border. To prevent a user from doing this, you can add noresize="noresize" to the <frame> tag,

1.8 HTML Tables

Tables are defined with the <table> tag. A table is divided into rows (with the <tr> tag), and eaeh row is divided into data cells (with the <td> tag).

The letters td stands for "table data," which is the content of a data cell. A data cell can contain text, images, lists, paragraphs, forms, horizontal rules, tables, ete.

```
<table>
<tr>
<td>row I, cel] 1</td>
</tr>
<tr>
<td>row 2, cell 1</td>
</tr></table>
```

1.8.1 Table attribute

There are many attribute in the table, the Most Common is align, width ,border ,cellpadding .cellspacing ect,

1.8.1.1 The Border Attdbute

If you do not specify a border attribute the table will be displayed without any borders. Sometimes this can be useful, but most of the time, you want the borders to show,
To display a table with borders, you will have to use the border attribute:

```
<table border="1">
<tr>
<td>Row 1, cell l</td>
<td>Row 1, cell 2</td>
</tr>
</table>
```

1.8.1.2 The align attribute

The align attribute is used as Center, Left, or Right to place the table on the page relative to browser.

```
<table align="center">
```

Here, will place a table on the center.

1.8.1.3 The width attribute

The table width is number of pixels or a percentage of the total page width.

```
<table width="l 00">
OR
<table width="50%">
```

1.9 HTML Forms and Input

1.9.1 Forms

Form elements are elements that allow the user to enter information (like text fields, text area fields, drop-down menus, radio buttons, eheckboxes, ete.) in a form.
A form is defined with the <form> tag.

```
<form method="hot to send" action="URL of script">
  <input>
  <input>
</form>
```

1.9.1.1 Type of method

There are two types of Methods used :

- Post Not very popular but used for large quantity data transfers.
- Get : More popular but used to transfer a single line of text.

1.9.1.2 Actlon

Action is the attribute that defines the receiving URL.The receiving page must contain a script that can collect the incoming data from the sender.

1.9.2 Input

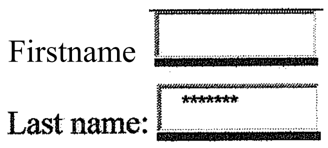
The most used form tag is the <input> tag. The type of input is specified with type attribute. The most commonly used input types are explained below.

1.9.2.1 Text Fields

Text fields are used when you want the user to type letters, mımbers, ete. in a form.

```
<form>
First name: <input type="text" name="firstname">
<br>
Last name: <input type="text" name="lastname">
</form>
```

How it looks in a browser:


Firstname

Last name: *******

Note that the form itself is not visible. Also note that in most browsers, the width of the text field is 20 characters.

1.9.2.2 Radio Buttons

Radio Buttons are used when you want the user to select one of a limited mımber of choices,

```
<form>
<input type="radio" name="sex" value="male"> Male
<br>
<input type="radio" name="sex" value="female"> Female
</form>
```

How it looks in a browser:

@ Male

Female

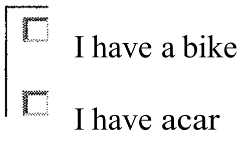
Note that only one option can be chosen.

1.9.2.3 Cheekboxes

Checkboxes are used when you want the user to select one or more options ofa limited number of choices,

```
<form>
<input type="checkbox" name="bike">I have a bike<br>
<input type="checkbox" name="car">I have acar
</form>
```

How it looks in a browser:

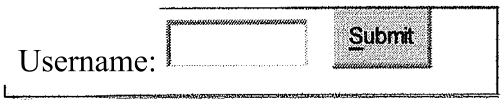


1.9.2.4 Submit Button

When the user clicks on the "Submit" button, the content of the form is sent to another file. The form's action attribute defines the name of the file to send the content to. The file defined in the action attribute usually does something with the received input.

```
<form name="input" action="html_form_action.asp" method="get">
Usemame: <input type="text" name="user">
            <input type="submit" value="Submit">
</form>
```

How it looks in a browser



If you type some characters in the text field above, and click the "Submit" button, you will send your input to a page called "htmlforrrr action.asp". That page will show you the .received input.

1.10 Summary

The web pages (HTML) are the mediums of communicating across internet.They provide information in plain text as well as Graphies, Sound, Tables, Links, ect...

The web pages are published on host system called web server, which have IP Address and Domain names and are connected to the www

CHAPTER 2. ACTIVE SERVER PAGES (ASP)

2.1 Introduction

Active Server Pages (ASP) is a technology that enables the development of dynamic web sites. ASP was developed by Microsoft to allow servet side development. ASP files are HTML files with special tags containing source code that provide the dynamic content. An ASP file can contain text, HTML tags and scripts. Scripts in an ASP file are executed on the server

2.1.1 What is ASP?

- ASP stands for Active Server Pages
- ASP is a program that runs inside US
- IIS stands for Internet Information Services
- US comes as a :free component with Windows 2000
- US is also apart ofthe Windows NT 4.0 Option Pack
- The Option Pack can be downloaded from Microsoft
- PWS is a smaller - but fully functional - version of US
- PWS can be found on your Windows 95/98 CD

2.1.2 ASP Compatibility

- ASP is a Microsoft Technology
- Torun US youmust have Windows NT 4.0 or later
- To run PWS you must have Windows 95 or later
- Chili ASP is a technology that runs ASP without Windows OS
- Instant ASP is another technology that runs ASP without Windows

2.1.3 What is an ASP File?

- An ASP file is just the same as an HTML file
- An ASP file can contain text, HTML, XML, and scripts
- Scripts in an ASP file are exeeuted on the server
- An ASP file has the file extension ".asp"

2.1.4 How Does ASP Differ frem HTML?

- When a browser requests an HTML file; the server returns the file.
- When a browser reqnests an ASP file, US passes the reqııest to the ASP engine. The ASP engine reads the ASP fıle,line by Iine, and executes the scripts in the file. Finally, the ASP file is retnrned to the brewser as plain HTML .

2.2 Setnng ASP Environments

To set-up your ASP environment you need to instaU your web and application server, The two popular options are Microsoft's Internet Information Server (HS) or Personal Web Server (PWS). The first one is preferred because that is mest likely to be your production environment in a real world situation. US requires a minimum of Windows NT 4.0 and you install it as part ofNT Option Paek, PWS can be installed on Windows 98 and so has the advantage ofletting you learn without having a.sereer,

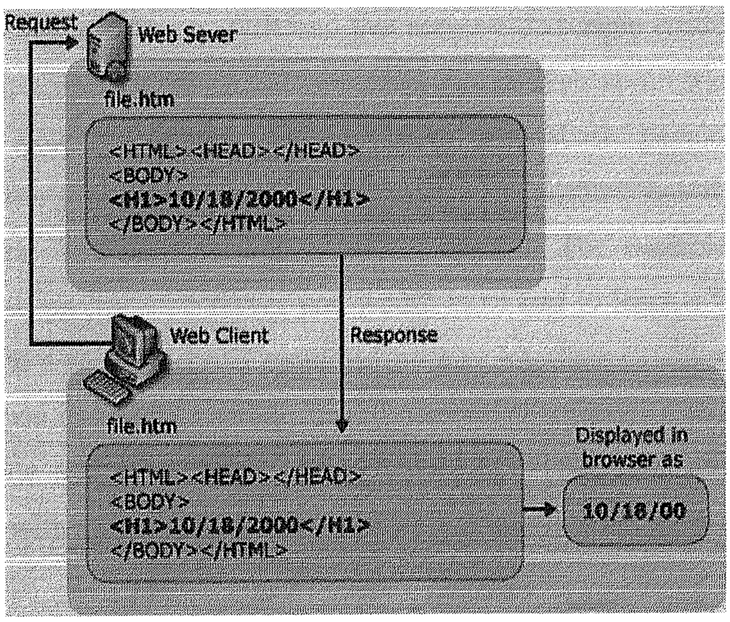
Once installed you normally create a virtual directory in your web servet. In US you will right mouse elick on the web servet entry and create a virtual directory. You specify a name for your application and browse to choose a folder on your hard drive tô store your souree eode files (e.g. C:\Inetpub\wwwroot\yourappname).. Yon can probably accept the default settings at this stage (play with the settings once you know more),

You should be ready to go. You can edit your souree files with any text editor. Microsoft would recommend Visual Interdev and this colour codes keywords ete but there are others. These eould inelude Homesite, Dreamweaver, Textpad, UltraEdit or even good old Notepad.

2.3 HTML Comparedtö ASP

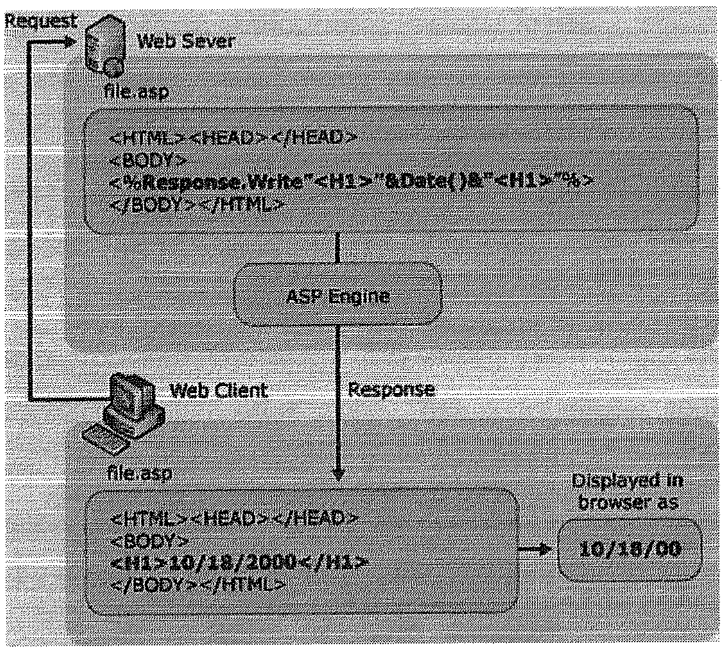
HTML is the simplest language for wtiting Web pages, but it allows you to create only static Web pages. When a Web client requests a static HTML file from a Web server, the Web- server sends the HTML file directly to the client without any computation being done. The client's browser then processes the HTML eode in the file and displays the content.

The following iltustratiorı shows the transmission ofa static file where the displayed date will never ehange.



VBScript is the simplest language for writing ASP pages. Ali the code samples in the Creating ASP Pages section are written in VBScript exeept for samples that are duplicated in JScript for comparison. When a Web client requests an ASP file from a Web server, the .Web server sends the ASP file through its ASP engine, where ali the server-side script code is executed or converted into HTML code. The converted code is then sent to the Web client,

The following illustration shows the transmission of dynam.ically generated content where the displayed date refl.ectsthe date atthe time ofthe request.



If you are an HTML author, you will fınd that server-side scripts written in ASP are an easy way to begin ereating more complex, real-world Web applications. If you have ever wanted to store HTML form information in a database, personalize Web sites according to visitor preferences, or use different HTML features based on the browser, you will fmd that ASP provides a compellingsolution. For example, previously, to process user input on the Web server you would have had to Ieam a language such as Perl or C to build a conventional Common Gateway lnterface (CGI) application. With ASP, however, you can collect HTML form information and pass it to a database using simple server-side scripts embedded directly in your HTML documents. If you are already familiar with scripting languages such as VBScript or Jscript

2.4 ASP Processing

An ASP page is requested the same way that an HTML page is requested, A request can optionally contain a query string after a question mark (?J, using the following syntax:

http://Server_name/MyASPFile.asp?varl =12&var2=Brown

When the server receives a request foran ASP file, it processes server-side scripteode contained in the file to build the HTML Web page that is sent to the browser. in addition to server-side script code, ASP files can contain HTML (including related client-side scripts) as well as ealls to COM components that perform a variety of tasks, such as connecting to a database or processing business logic.
US prooesses an ASP file in the following order when a request is received from a client:

1. If an ISAPI filter is installed on the Web site, the ISAPI filters is processed first. This is true for all applications.
2. If the ASP application contains a Global.asa file in the root directory, the Global.asa is proeessed, Global.asa files speci:fyevent scripts and declare objects that have session er application scope, They donot display content; instead they stores event information and objects used globally by the ASP applieation,
3. In the requested ASP file, IIS separates the script blocks :fromthe static HTML eode blocks, reserving the static eode in the response body.

4. US processes the script blocks. The script blocks might include transaction processing, database access ealls, or calls to COM components in which case COM+ handles some ofthe processing,
5. After the ASP page script blocks are proeessed, their output is injected into the response body with the static HTML code.
6. The response is sent to the client.

2.5 ASP and COM Components

With ASP,. you can combine HTML pages, script commands, and COM components to create interactive Web pages or powerful Web-based applications, which are easy to develop and modify.

COM components dramatically extend the power of ASP. COM components are pieces of compiled eode that can be called from ASP pages. COM components are secure, compact, and reıısable objects that are compiled as DLLs. They can be written in Visual C++, Visual Bask, er other languages that support COM.

2.6 ASP Syntax

You cannot view the ASP source code by seleeting "View souree" in a browser, you will only see the output :from the ASP file, which is plain HTML. This is because the scripts are executed on the server before the result is sent back to the browser.

2.6~1 Tbe Basie Syntax Rule

An ASP file normally contains HTML tags, just like an HTML file. However, an ASP file can also contain server scripts, surrounded by the delimiters <0.k and 0.k>. Server scripts are exeented on tlıe server, and can contain any expressions, statements, procedures, or operators valid for the scripting language you prefer to use.

2.6.2 The Response Object

The Write methed of the ASP Respense Object is used to send content to the browser, For example, the following statement sends the text "Hello World" to the browser:

```
<% response.write("Hello World!") %>
```

2.6.3 VBScript

Using VBScript on the server in an ASP page isn't very different from using it in applications or on ordinary Web pages. Nearly all of the VBScript commands are available for use on the server. VBScript commands that interact with the user, however, are not available. For example, imagine a command that opens a dialog box on the server. No one is around to dismiss it, and the system can do nothing until someone dismisses it!

The VBScript statements that present user interface elements are InputBox and MsgBox. in addition, the VBScript function CreateObject is replaced by a method of the Server object, This is necessary to track the object instances on the server side. Yon can add comments to your script just as you normally do. However, you cannot add comments inside an output expression. An output expression is an expression or value that is evaluated and written to the Web page. It is contained within the delimiters <%= and %>.

However, the default scripting langııage is VBScript:

```
<html>
<body>
<% response.write("Hello World!") %>
</body>
</html>
```

The example above writes "Hello Worldl" into the body of the document.

2.7 ASP Variables

A variable is used to store information.

If the variable is declared outside a prooedure it can be changed by any script in the ASP

If the variable is declared inside a procedure, it is created and destroyed every time procedure is executed.

2.7.1 Lifetime of Va:riables

A variable declared outside a procedure can be accessed and ehanged by any script in the ASP file.

A variable declared inside a procedure is created and destroyed every time the procedure is executed. No scripts outside the proeedure can access or change the variable.
To declare variables aeeessible to more than ene ASP file, deelare them as session variables or application variables,

2.7.2 Session Variables

Session variables are used to stere information about ONE single user, and are available to all pages in one application. Typically information stored in session variables are name, id, and preferences,

2.7.3 Application Variables

Application variables are also available to all pages in ene application. Application variables are used to store information about ALL users in a speeific applieation.

2.8 ASP Forms and Userl:npu.t

The Request.QueryString and Request.Form commands may be used to retrieve information from forms, like user input.

2.8.1 User Input

The Request object may be used to retrieve user information from forms,
Form example:

```
<form method="get" action="simpleform.asp">
First Name: <input type="text" name="fname">
<br/>
Last Name: <input type="text" name="lname">
<br/><br/>
<input type="submit" value="Submit">
</form>
```

User input can be retrieved in two ways: With Request.QueryString or Request.Form

2.8.2 Reqnest.Queryôtrhıg

The Request.QueryString command is used to collect values in a form with method="get". Information sent from a form with the GET method is visible to everyone (it will be displayed in the browser's address bar) and has limits on the amount of information to send.

If a user typed "Bill" and "Gates" in the form example above, the URL sent to the server would look like this:

```
http://www.w3Schools.com/simpleform.asp?fname=Bill&lname=Gates
```

Assume that the ASP file "simpleform.asp" contains the following script:

```
<body>
Welcome
<%
response.write(request.querystring("fname"))
response.write(" " & request.querystring("lname"))
%>
</body>
```

The browser will display the following in the body of the document:

```
Welcome Bill Gates
```

2.8.3 Reqaest.Form

The Request.Form command is used to colleet values in a form with method="post". Information sent from a form with the POST method is invisible to others and has no limits on the amount of information to send.

If a user typed "Bill" and "Gates" in the form example above, the URL sent to the server would look like this:

```
http://www.w3schools.com/simpleförm:asp
```

Assume that the ASP file "simpleform.asp" contains the following script:

```
<body>
Welcome
<%
response. write(request.form("fname"))
response.write("   " & request.form("lnam.e"))
%>
</body>
```

The browser will display the following in the body ofthe document:

```
Welcome Bill Gates
```

2.8.4 Form Validation

User input should be validated on the browser whenever possible (by elient scripts), Browser validation is faster and you reduce the server load. You should consider using server validation ifthe user input will be inserted into a database. A good way to validate a form on the server is to post the form to itself, instead ofjumping to a different page. The user will then get the error messages on the same page as the form. This makes it easier to discover the error.

2.9 ASP Sessien Object

The Session object is used to stere information about, or change settings for a user session. Variables stored in the Session object hold information about one single user, and are available to all pages in one application.

2.9.1 Wbat are Sessions?

Sessions are a very convenient ASP feature. When someone visits a web page on your site, ASP calls that a "session" and immediately can differentiate that user from all other users at a site. Anything stored in that user's session can be retrieved and manipulated from that page and the next pages they visit, and the data will be tied to that user, Session data is generally attached to one user. When a user visits their first page ofyour site, that page and every page they visit is collectively called a session. Any data attached stored in that session object is private to the pages that user is visiting.

2.9.2 The Session objeet

When you are working with an application, you open it, do some changes and then you close it. This is much like a Session. The computer knows who you are. it knows when you start the application and when you end. But on the İnternet there is one problem: the web server does not know who you are and whafyou do because the HTTP address doesn't maintain state.
ASP solves this problem by creating a unique cookie for each user. .The cookie is sent to the client and it contains information that identifies the user. This interface is called the Session object.

The Session object is used to store information about, or change settings for a user session. Variables stored in the Session object hold infömation about one single user, and are available to all pages in. one application. Common information stored in session variables are name, id, and preferences. The server creates a new Session object for each new user, and destroys the Session object when the session expires.

2.9.3 When does a Session Start?

A session starts when:

- A new user requests an ASP file, and the Global.asa file includes a Session_OnStart procedure
- A value is stored in a Session variable
- A user requests an ASP file, and the Global.asa file uses the <object> tag to instantiate an object with session scope

2.9.4 Stere and Retrieve Session Variables

The most important thing about the Session object is that you can store variables in it.

The example below will set the Session variable *username* to "Donald Duck" and the Session variable *age* to "50":

```
<%
Session("usemame")="Donald     Duck"
Session("age")=SO
%>
```

When the value is stored in a session variable it can be reached from ANY page in the ASP application;

```
Welcome <°/oResponse.Write(Session("usemameıı))%>
```

The line above retums: "Welcome Donald Duck".

2.10 ASP Ineladhıg Files

The #include directive is used to ereate functions, headers, footers, or elements that will be reused on multiple pages.

2.10.1 The #include Direetive

You can insert the content of one ASP file into another ASP file before the server executes it, with the #include directive, The #include directive is used to create funetions, headers, footers, or elements that will be reused on multiple pages.

2.10.2 How to Use the #include Directive

Here is a file called "mypage.asp":

```
<html>
<body>
<h3>Words of Wisdom:</h3>
<p><!--#include file="wisdom.inc"--><ip>
<h3>The time is:<lh3>
<p><!--#include file="time.inc"--></p>
</body>
</html>
```

2.10.3 Syntax for lnchıding Files

To include a file in an ASP page, place the #include directive inside comment tags:

```
<!--#include virtual="somefilename"-->
or
<!--#include file ="somefilename"-->
```

2.10.3.1 The Virtual Keyword

Use the virtual keyword to indicate a patlı beginning with a virtual directory.
If a file named "lıeader.inc" resides in a virtual directory named /html, the following line would insert the contents of "header.inc":

```
j <!--#incl~de ~~~':,;/h~l/header.inc"    -->    J
```

2.10.3.2 The File Keyword

Use the file keyword to indicate a relative patlı. A relative patlı begins with the directory that contains the including file.
Ifyou have a file in the html directory, and the file "header.inc" resides in html\headers, the following line would insert "header.inc" in your file:

```
<!-- #include file ="headers\header.inc" -->
```

Note that the patlı to the inehıded file (headers\header.inc) is relative to the including file. If the file containing this #include statement is not in the html directory, the statement will not work.You can also use the file keyword with the syntax (..\) to include a file from a higher-level directory.

2.11 Aetive Server Objects

The Active Server Object Model consists of six intrinsic objects. These objects do not need to be created before they are used.

1. Application object - application wide data
2. Request object - data sent from client to server
3. Response object - data sent from server to client

4. Session object - user specific data
5. Server object - extending US with custom components
6. Object Context object - makes pages part ofa transaction

CHAPTER 3. JAVASCRIPT

3..1 Introdaetion

JavaScript is used in millions of Web pages to improve the design, validate forms, and much more.

JavaScript was developed by Netscape and is the most popular scripting language on the Internet.

3.1.1 What is JavaScript?

- JavaScript was designed to add interactivity to HTML pages
- JavaScript is a scripting language ~ a scripting. language is a lightweight programming language
- A JavaScript is lines of executable computer code
- A JavaScript is usually embedded directly in HTML pages
- JavaScript is an interpreted language (means that scripts execute without preliminary compilation)
- Everyone can use JavaScript without purchasing a license
- JavaScript is supported by ali major browsers, like Netscape and Intemet Explorer

3.1.2 Are Java and JavaScript the same?

NO!

Java and JavaScript are two completely different languages!

Java (developed by Sun Microsystems) is a powerful and very complex programming language - in the same category as C and C++.

3.1.3 What can a JavaScript Do?

- JavaScript gives HTML designers a programming tool - HTML authors are normally not programmers, but JavaScript is a scripting language with a very simple syntax! Almost anyone can put small "snippets" of code into their HTML pages.

- JavaScript can put dynamic text into an HTML page - A JavaScript statement like this: document. write("<hl>n +name+ "<lhl>11) can write a variable text into an HTML page

- JavaScript can react to events - A Java.Script can be set to execute when something happens, like when a page has füıished loading er when a user clicks on an HTML element

- JavaScript can read and: write HTML elements - A JavaScript can read and change the content of an HTML element

- JavaScript can be usedto validate data - A JavaScript can be used to validate form data before it is submitted to a sereer, this will save the server .from extra processiag

3.2.JavaScript How TO?

The HTML <script> tag is used to insert a JavaScript into an HTML page.

3.2.1 How to Put a JavaScript Into an HTML Page

```
<html>
<body>
<script·type="text/JavaScript">
document.write("Hello Worldf")
</script>
</body>
</html>
```

The code above will produce this output on an HTML page: Hello World!
To Irısert a script in an HTML page, we use the <script> tag. Use the type attribute to define the scripting language <script type="text/JavaScript">
Then the JavaScript starts: The JavaScript command for writing some output to a page is document.write. documeııt.write("Bello Wo.rld!n)

Then the <script> tag has to be closed. </script>

3.2.2 How to Handle Older Browsers

Browsers that do not support scripts will display the script as page content. To prevent them from doing this, we may use the HTML comment tag:

```
<script type="text/javascript">
<!--
   some statements
//-->
</script>
```

The two forward slashes at the end of comment line *(ti)* are a Java.Script comment symbol, This prevents the JavaScript compiler from compiling the line.

Nete: You cannot put **//** in front of the first comment line (like //<!--), because older browsers will display it.

3.3 JavaScript Where To

- Scripts in the body section will be executed WHILE the page loads,
- Scripts in the head section will be exeeuted when CALLED;

3.3.1 Where to put the JavaScript

Scripts in a page will be executed immediately while the page loads into the browser. This is not always what we want, Sometimes wewant to execute a script when a page loads, other times when a user triggers an event.

3.3.1.1 Scripts in the head seetiene

Scripts to be executed when they are called, or when an event is triggered, go in the head section, When you place a script in the head section, you will ensure that the script is loaded before anyone uses it.

```
<html>
```

```
<head>
<seript  type="text/javascript">
    Some statements
</script>
</head>
```

3.3.1.2 Seripts in the body seetiom

Scripts to be executed when the page loads go in the body section. When you place a script in the body section it generates the content of the page,

```
<html>
<head>
</head>
<body>
<script type="text/javascript">
    Some statements
</script>
</body>
</html>
```

3.3.1.3 Seripts in both the body and the head seetlonı

We can place an unlimited number of scripts in your docuınent, so you can have scripts in both the body and the head section,

```
<html>
<head>
<script type="text/javascript">
    some statements
</script>
</head>
<body>
<script type="text/javascript">
    some statements
```

```
</script>
</body>
```

3.4 JavaScdpt Variables

A variable is a "container" for information you want to store. A variable's value can change during the script. You can refer to a variable by name to see its value or to change its value.

Rules for Variable names:

- Variable names are case sensitive
- They must begin with a letter or the underscore character

3.4.1 Deelare a Variable

- We can create a variable with the var statement: var strname = seme value
- We can also create a variable without the var statement: strname =some value

3.4.2 Assign a Value to a Variable

We can assign a value to a variable like this: var stmame = "Hege"
The variable name is on the left side of the expression and the value you want to assign to the variable is on the right. Now the variable "strname" has the value "Hege",

3.4.3 Lifetime of Variables

When you declare a variable within a function, the variable can o:nly be accessed within that function. When you exit the function, the variable is destroyed, These variables are called local variables. We can have local variables with the same name in different functions, because each is recognized only by the function in which it is declared.

If you declare a variable outside a function, all the functions on your page can access it. The lifetime of these variables starts when they are declared, and ends when the page is closed.

3.5 JavaScript Fueetiens

A function contains some code that will be executed by an event or a call to that function. A function is a set of statements. You can reuse functions within the same script, or in other docuınents. You define functions at the beginning ofa file (in the head section), and call them later in the docuınent.

3.5.1 How to Define a Function

To create a function you define its name, any values {"arguınents"), and some statements:

```
function myfunction(argumentl, argument2,etc)
{
some statements
}
```

A function with no arguınents must include the parentheses:

```
function myfunction()
{
some statements
}
```

Arguınents are variables used in the function. The variable values are values passed on by the function call, By placing functions in the head section of the. document, you make sure that all the code in the function has been loaded before the function is called, Some functions return a value to the calling expression

```
function result{a,b)
{
c=a+b
retıırn c
}
```

3.5~2 How to Cali a Function

A function is not executed before it is called,

We can call a function containing arguments: myfunction(argument1,argument2,etc)
Or without arguments: myfünctionO

3.5.3 The return Statement

Functions that will return a result must use the "return" statement, This statement specifies the value, which will be returned to where the function was called from.

3.6 JavaScript Cenditional Statements

Conditional statements in JavaScript are used to perform different actions based on different conditions.

in JavaScript, we have three conditienal statementsı

- if statement - use this statement if you want to execute a set ofcede when a condition is true
- if...else statement - use this statement if you want to select one of two sets of lines to execute
- switch statement - use this statement if you want to select one of many sets of lines to execute

3.6.1 If and If•••else Statement

3.6.1.1 Without ELSE

You should use the if statement if you want to execute some code ifa condition is true.

```
if (condition)
        {
        code to be executed if condition is true
        }
```

Example:

There is no...else... in this example. Just tell the code to execute some code if the condition is true

```
<script  type="text/javascript">
//If the  time  on  your  browser  is less  than  10,
//you  will  get  a  "Good  morning"   greeting.
var  d=new  Date()
var  time=d.getHours()
if (time<lO)
{
document.write("<b>Good     moming</b>")
}
</script>
```

3.6.1.2 Witb ELSE

If you want to execute some code if a condition is true and another code if a condition is false, use the **if....** else statement.

```
if (condition)
{
code to be exeeuted if condition is true
}
else
{
code to be executed if condition isfalse
}
```

Exampler

```
<script type="text/javascript">
//Ifthe time on your browser is less than 10,
//you will get a "Good moming"  greeting.
//Otherwise you will get a "Good day" greeting.
var d = new Date()
var time = d.getHours()
if (time< 10)
```

```
{
document.write("Good morning!")
}
else
{
document..write("Goodday!")
}
</script>
```

3.6.2 Switch Statement

You should use tlıe Switch statement if you want to select one of many blocks of code to be executed.

```
switch (expression)
{
case labell:
 code to be executed  if expression  = labell
 break
case label2:
 code to be executed  if expression  = label2
 break
default:
 code to be executed
 if expression  is different
from  both  labell  and  label2
}
```

This is how it werksı
First we have a single expression (most o:ftena variable) that is evaluated once. The value f tlıe expression is then compared with the values for each case in the structure.If there is match, the block of code associated with that case is executed.Use break to prevent tlıe code from running into the next case automatically.

```
<script type="text/javascript">
//Y ou will receive a different greeting based
//on what day it is. Note that Sımday=O,
//Monday=l, Tuesday=2, ete.
var d=new Date()
theDay=d.getDay()
switch (theDay)
{
case 5:
 document.write("Finally Friday")
 break
case 6:
 document.write("Super Saturday")
 break
case 0:
 document.write("Sleepy Sunday")
 break
default:
 document.write("I'm looking forward to this weekend!")
}
</script>
```

3.6.3 Cenditiona] Operatör

JavaScript also contains a conditional operator that assigns a value to a variable based on some condition.

```
variablename=(condition)?valuel :value2
```

3.7 JavaScript Loeping

Looping statements in JavaScript are used to execute the same block of code a specified number of times.

in JavaScript we have the following Ioopmg statements:

- While - loops through a block of code while a condition is true

- Do ...while - loops through a block ofcode once, and then repeats the loop while a condition is tme
- For- run statements a specified number oftimes

3.7.1 While

The while statement will execute a block of code while a condition is true,

```
while (conditionı
{
   code to be exeeuted
}
```

3.7.2 Do•••while

The do...while statement will execute a block of code once, and tlı.en it will repeat the loop while a condition is true

```
do
{
   code to be executed
}
while (condition)
```

3.7.3 For

The for statement will execute a block of code a specified number of times

```
for (initialization;  condition;  increment)
{
   code to be executed
}
```

3.8Summary

Java Script is used in HTML document to make some eondition and application and the Java Script is lines of executable computer code.

Java Script in HTML will be executed into 'two sections:

- Body
- Head

CHAPTER 4. DATABASE. MiCROSOFT ACCESS DATABASE.

4.1 Introduction

The database is an organized collection of data. A database management system (DBMS) such as Access, FileMaker Pro, Oracle or SQL Server provides you with the software tools you need to organize that data in a flexible manner. lt includes facilities to add, modify or delete data from the database, ask questions (or q_ueıies) about the <lata stored in the database and produce reports summarizing selected côriterits.

4.1.1 What is a database?

The database one or more, large structured sets of persistent data.Usually associated with software to update and query the data. A simple database might be a single file containing many records, each of which contains the same set of fields, where each field is a certain fixed width, A database is one component of a database management system.

4.1.2 Database Management System (DBMS)

The DBMS is in charge of aecess, security, storage and a host of other functions for the database system. It does this through a selection of computer programs. This allows it to manage the large, structured sets of persistent data, which make up the database, and provide access to the data for multiple, concurrent users whilst maintaining the integrity of the dara.

The DBMS provides security facilities in a variety of forms, both to prevent unauthorized access and to prevent authorized users from accessing da.ta at the same time as each other or overwriting information, which they should not. As a first line of security to prevent unauthorized users from accessing the system, it uses user names and passwords to identify operators, programs and individual machines and sets of privileges assigned to them. These privileges can include the ability to read, write and update data in the database.

The DBMS controls who is able to read and write <lata through the use of locks. Loeks are used for read and write to specific rows of data in relational systems, or

objects in object oriented ones, which are currently being used. By doing this only one user at a time·can alter data.

DBMS'stypically run on special hardware, for example servers which have been specially designed to only run databases and often only with specific database systems in ınind. This allows the hardware designers to increase the ritıtiibe:r and speed of its network connections, use multiple processors and dises to Speed up searched for information, increase the amount of memory and cache, as well<as a host of other features not found on standard hardware. This also allows the pl'Qğtıiıımıersto take advantage of special features in the hardware to get the best possible\p~rfôrın.filıcefrom the system,

4.1.3 Database Design

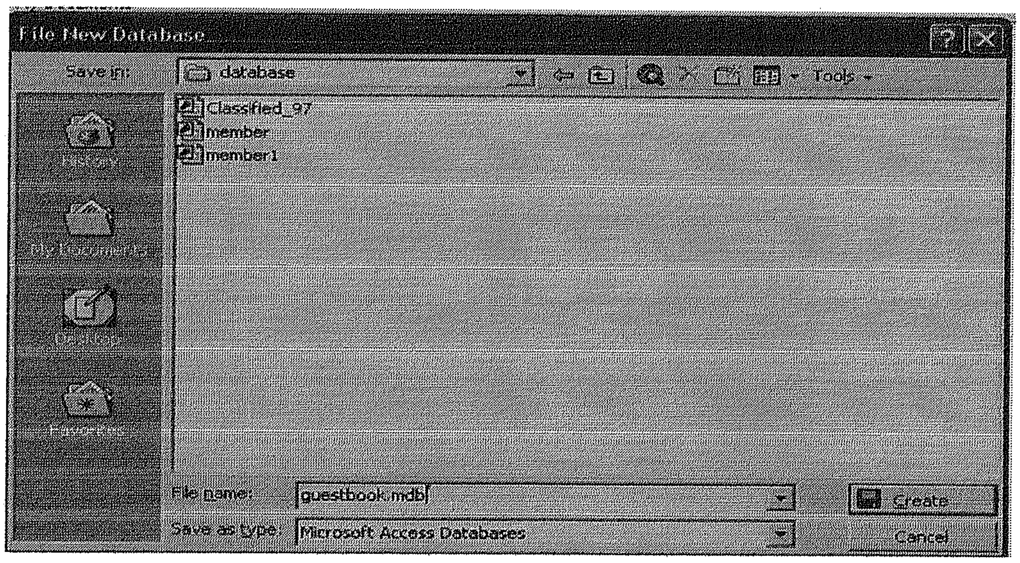
Database Design is the process of taking the requirements for the database, Le. what inforınation is to be stored, who can aeeess it, how many people may be accessing it simultaneously ete. and designing a system which will achieve this.

This initial stage is carried out by either a database design specialist, or the Database Adıninistrators and Software Analysts. At the end of it, a schema is produced which defines what data is stored, how it relates to other data, and who can access, add and modify data. This sehema is broken down into several sub-schemas which define individual tables and relationships between the tables and the data contained within.

4.2 Microsoft Aecess

Microsoft Access is a popular relational database management system for creating desktop and client/server database applications that run under the Windows operating system. This database is easy to use,

Access stores an entire database application within a single file. An Access *.mdb* file can contain data objects, like tables, indexes and queries, as well as application objects like forms, reports, macros, and visual basie code.


File New Database

Save in: database

Classified_97
member
member1

File name: guestbook.mdb

Save as type: Microsoft Access Databases

Figure 4.1. To create database (.mdb)

Irı this application, we used Microsoft Access as our database system. The reasön to use Access was that we did not have many tables and queries and therefore it would be inefficient if we were to use Oracle or any other very-high Database system.
Microsoft Access gives us to create tables and do any manipulations on them and to create queries and retrieve data from any combination ofpre-defined user tables.

4.3 Creating the Table Database

To create a database your first need to open Microsoft Aeeess and choose 'Blank Access Database' from the starting menu. You will be prompted for a name for the database and where you want it saved, Cali the database 'guestbook.mdb" and save it in the same directory as the web page connecting to the database is going to be, as shown figure above,
You should now see the main Access dialog box, from here select 'Create table in design view'.

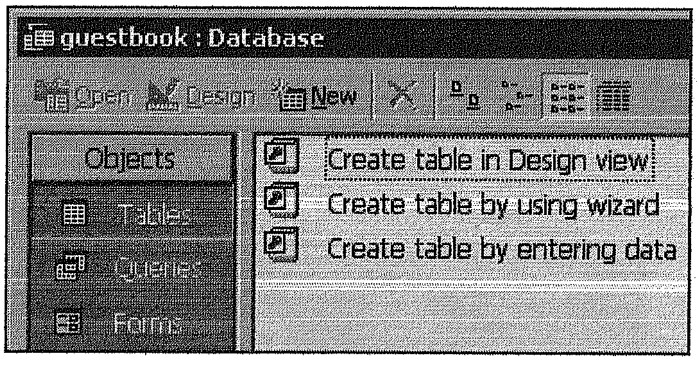
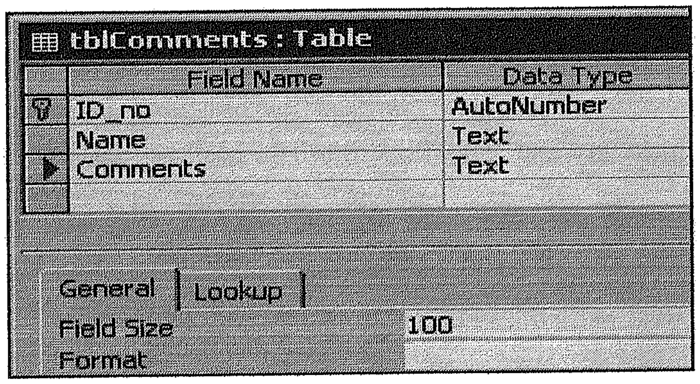

guestbook : Database
Open
Design
New
Objects
Tables
Queries
Forms
Create table in Design view
Create table by using wizard
Create table by entering data

Figure 4.2. Creating the Table

Now, we can begin setting up the field in our database. Add the fields and set their data types so that it looks like this (don't worry about the name ofthe table just yet we'll set it in a moment):



tblComments : Table

	Field Name	Data Type
🔑	ID_no	AutoNumber
	Name	Text
▶	Comments	Text

General | Lookup

Field Size	100
Format	

Figure 4.3. Designing the Table

Field 1 needs lobe called 'ID no' and have the data type of 'AutoNumber Also set this field as the primary key.

Field 2 needs to be called 'Name' and have the <lata type oftext.

Field 3 needs to be called 'Comments' and has the data type of text, but this time you need to change the default field size of 50 to 100 characters under the 'General' tab in the 'Field Properties' box at the bottom ofthe screen.

ünce ali the field' s have been created and the data types and primary key set, save the table as 'tblComments'.

Now the table has been created you need to enter some test data into the table. You can do this by double-clicking on the new table (tblCominents) in the main dialog box. From here, you can enter some test data. I would recommend entering at Ieast 3 pieces oftest dara.

In order to enforce the uniqueness of records within this table, we'll create a primary key, To do this seleet the ID_no field with your cursor, and press the primary icon in the toolbar:

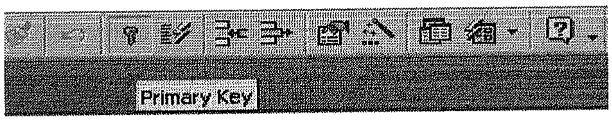


Figure 4.4. Assigning the Primary Key

4.4 What is the p:rimary key?

When we are accessing the records ofa database, we need to be able to do so with confidence that we are accessing exactly the right records. To help us do this, we use keys.

A key is a field (or set of field) that uniquely identifies a particular record in the table. For example, the ID_no field of the tblComment tableisl:ıiiiqu.ely generated by the tblComment table.

The way in which we set up the keys in our tables determines the uniqueness of record, and also allows us to link these records to records in other tables.

4.5 Database objeets

There are six different types of database objects (tables, queries, forms, reports, macros and modules). However, I want to explain the Table and Form only, because it is used in my project.

4.5.1 Tables

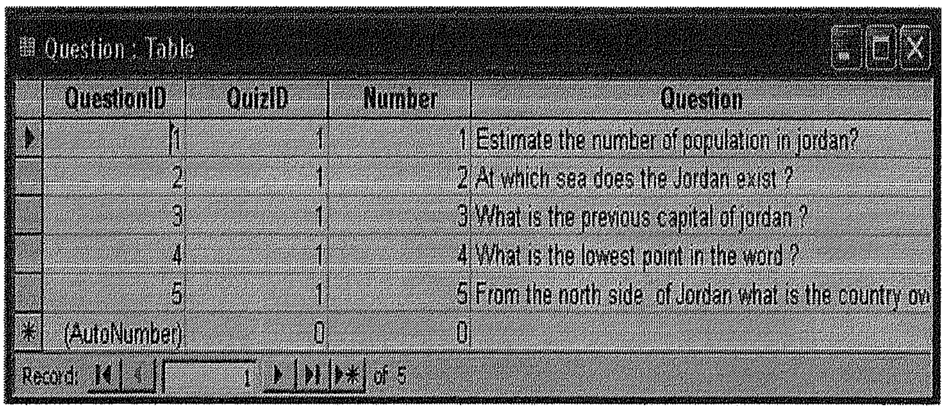
A Microsoft Access database is a file made of various intemal objects: tables, queries, forms, reports, ete. All these are mauaged from an object called the Database Window. The objects are kept in categories. To access an object, you click the button that corresponds to its category.

A table is the central point ofa database, because all data is. ştor~<l iııtı:ıl:>les. For better organization, you wiU have various tables iti your database,i~@li.fôr}~tlifferent purpose.

Eaeh table is recogiiized by its name. To open a particulartabl~, you c~4ouble~ click it. You can also right-click a table's name and click Open. Ifthedesired table is already selected on the Database Window, you can cliek the Open btı.ttôııto epen it.

4.5.1.1 Opening a Table

1. On the database window, in the Object Bar (Microsoft Access 2000) click the Table button.
2. Double - click Question,


Question : Table

	QuestionID	QuizID	Number	Question
▶	1	1	1	Estimate the number of population in jordan?
	2	1	2	At which sea does the Jordan exist ?
	3	1	3	What is the previous capital of jordan ?
	4	1	4	What is the lowest point in the word ?
	5	1	5	From the north side of Jordan what is the country ov
*	(AutoNumber)	0	0	

Record: 1 of 5

Figure 4.5. Opening a Table

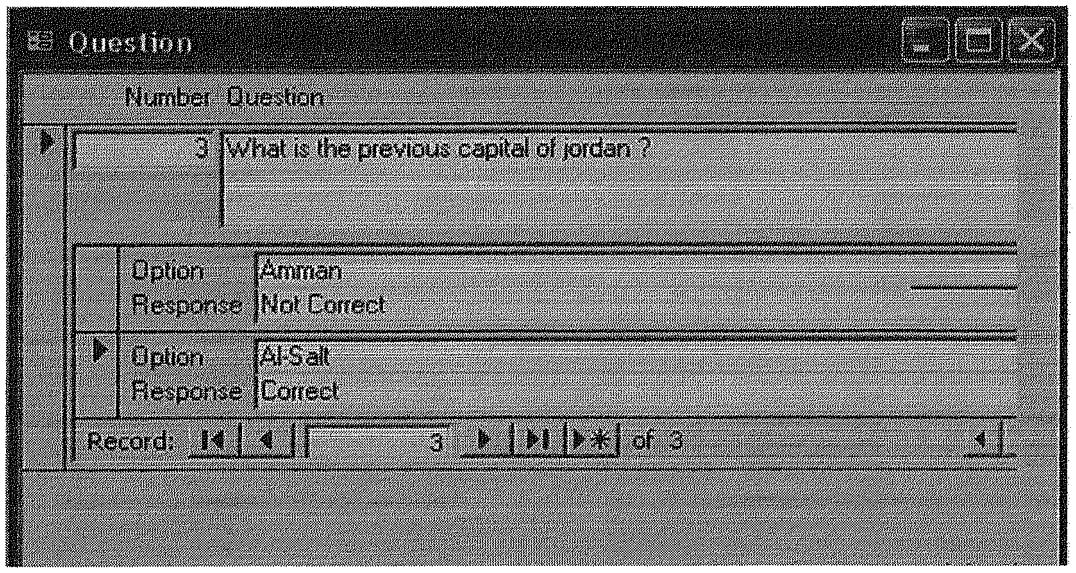
4.5.2 Database Objects (Forms)

Tables are used to create the data in your database. Forms are windows objects used to view and enter data in your database.

A form can combine data that is part ôfôııe ör more tables or queries. Forms are the window interfaces that you usually will ask your users to access when performing data entry in your database.

4.5.2.1 Opening A Form

1. On the Daıabase Window, click Forms
2. Double-click Question


Question

Number	Question
3	What is the previous capital of jordan ?

Option	Amman
Response	Not Correct
Option	Al-Salt
Response	Correct

Record: 3 of 3

Figure 4.6. Opening a Form

4.6 Connecting To an Access Database

When we come to write the code for our application, we will need to refer to our database. We will do so via the ActiveX Data Objects (ADO) and using the ADO connection, command and record set object to handle the connection to the database, and we will use the Microsoft Jet Provider for MS Access Database to provide the data.

```
Dim objConn
Set objConn =Server. Createobject tADODB.Connection")
objConn . Open "provider = Microsoft. Jet. OLEDB. 4. 0{' &'-
"Data Source = D:\database\guestbook, mdb"
```

4.7 Summary

If you are reading this page then I shall assume that you already know a little bit about ASP and running ASP scripts.

The first thing we are establish a connection with the DBMS, and we use in this case is Microsoft Access. Before we can connect to a database, we need a database to connect too.

CHAPTER 5.. ACTIVE DATA OBJECTS (ADO)

5.1 Introductlon

Microsoft has introduced a new technique for aecessing databases called Activex Data Objects, or ADO. ADO is an easy to use API for applicaticn developers that allows them to work with databases that have an OleDb provider. The combination ADO/OleDb has been introduced together as a replacement of ODBC.

For some developers ADO will still be an unknown area, This sessien tries to introdnee them to the new world of ADO.

5.1.1 What is ADO?

- ADO is a Microsoft technology
- ADO stands for ActiveX Data Objects
- ADO is a Microsoft Active-X eomponent
- ADO is aııtomatically installed with Microsoft IIS
- ADO is a programming interfaee to access data in a database

5.1.2 Accessing a Database froın an ASP Page

The common way to access, a database from inside an ASP page is to:

- Create an ADO connection to a database
- Open the database connection
- Create an ADO recordset
- Open the recordset
- Extract the <lata you need from the recordset
- Close the recordset
- Close the connection

5.2 ADO Database Conneetion

Before a database can be accessed from a web page, a database connection has to be established. The ADO Connection object is used to create an open connection to a dara source, Through this connection, you can access and manipulate a database.

5.2.1 Create a DSN-less Database Conneetlon

The easiest way to connect to a database is to use a DSN-Iess connection. A DSN-Iess connection can be used against any Miereseft Aeeess database on your web site.

If you have a database called "data.mdb" located in a web directory like "c:/web/", you can connect to the database with the following ASP code:

```
<°/o
set conn=Server.Create0bject("AD0DB.Connection")
conn.Provider="Microsoft.Jet.OLEDB.4.0"
conn.Open  "c:/web/data.mdb"
%>
```

Note, from the example above, that you lıave to specify the Microsoft Access database driver (Provider) and the physical patlı to the database on your computer.

5.2.2 Create an ODBC Database Cenneetion

If you have an ODBC database called "data.mdb" you can connect to the database with the following ASP eode:

```
<%
set conn=Server.CreateObject("ADODB.Connection")
conn.Open  "<lata"
%>
```

With an ODBC connectien, you can connect to any database, on any computer in your network, as long as an ODBC connection is available.

5.2.2.1 An ODBC Conneetton to an MS Aecess Database

Here is how to ereate a connectioa to a MS Aecess Databese:

1. Open the ODBC icon in your Control Panel.
2. Choose the System DSN tab.
3. Click on Add in the System DSN tab,

4. Select the Microsoft Access Driver, Click Finish.
5. In the next screen, click Seleet to loeete the database,
6. Give the database a Data Source Name (DSN).
7. Click OK.

This configuration has to be done on the computer where your web site is located. If you are running Personal Web Server (PWS) or Intemet Information Server (US) on your own computer, the instructions above will work, but if your web site is located on a remote server, you have to have physical aceess to that servet, or ask your web host to do this for you.

5.3 ADO Recordset

To be able to read database data, the data must first be loaded into a recordset, The ADO recordset object is used to hold a set of records from a database table.

5.3.1 Create an ADO Table Reeordset

After an ADO Database Connection has been created,now it is possible to create an ADO Recordset.

Suppose we have a database narned "data.mdb", we can get access to the "Customers" table inside the database with the following lines:

```
<%set conn=Server.CreateObject("ADODB.Connection")
conn.Provider="Microsoft.Jet.OLEDB.4.0"
conn.Open "c:/web/data.mdb"
set rs=Server.CreateObject("ADODB.recordset")
rs.Open "Customers", conn
o/o>
```

5.3.2 Create an ADO SQL Recordset

We can also get aceess to the data.mdb in the "Customers" table using SQL:

```
<%
set conn=Server.CreateObject("ADODB.Connection")
```

```
conn.Provider="Microsoft.Jet.OLEDB.4.0"
conn.Open   "c:/web/data.mdb"
set rs=Server.CreateObject("   ADODB.recordset")
rs.Open  "Select * from Customers", conn
o/o>
```

5.3.3 Extract Data from the Reeordset

After a recordset is opened, we can extract data from recordset. Suppose we have a database named "data.mdb", we can get access to the "Cıistomeıs" table inside the database with the following lines:

```
<°/o
set conn=Server.CreateObject("ADODB.Connection")
conn.Provider="Microsoft.Jet.OLEDB.4.0"
conn.Open "c:/web/data.mdb"
set rs=Server.CreateObject("ADODB.recordset")
rs.Open "Seleet * from Customers", eonn
for each x in rs.fields
  response,write(x.name)
  response.write(" = ")
  response.write(x.value)
Next
%>
```

5.4 ADO Dispfay

The Aetive Data Objects is to display the <lata in an HTML table.

5.4.1 Display the Field Names and Field Yahıes

We have a database named "data,mdb" and we want to display the data from the "Customers" table

```
| <html~
```

```
<body>
<%
set conn=Server.Create0bject("AD0DB.Connection")
conn.Provider="Microsoft.Jet.OLEDB.4.0"
conn.Open  "c:/webdata/northwind.mdb"
set rs = Server.CreateObject("ADODB.recordset")
rs.Open  "Select * from Customers",  conn
do until rs.EOF
  for each x in rs.Fields
    Response. Write(x.name)
    Response.Write("  = ")
    Response.Write(x.value   & "<br />")
  next
  Response. Write("<br  />")
  rs.MoveNext
loop
rs.close
conn.close
%>
</body>
</html>
```

5.5ADO Sort

We may use SQL to specify how to sort the <lata in the record set.

5.5.1 Sert the Data

We want to display the "Companynanıe" and "Contactname" fields from the "Customers" table, ordered by "Cempanyname".

```
<html>
<body>
<%
Set conn=Server.CreateObject("ADODB.Connection")
conn.Provider="Microsoft.Jet.OLEDB.4.0"
conn.Open   "c:/webdata/northwind.mdb"
set rs = Server.Create0bject("AD0DB.recordset")
sql="SELECT Companynaıne, Contactname FROM
Customers ORDER BY CompanyNaıne"
rs.Open sql, conn
%>
<table border="l"  width.="100%">
  <tr>
  <%for each x in rs.Fields
    response.write("<th>" & x.naıne & "</th>")
  next%>
  </tr> <%do until rs.EOF%><tr>
    <%for each x in rs.Fields%>
      <td><%Response.Write(x.value)%></td>
    <%next
    rs.MoveNext%>
    </tr>
  <%loop
  rs.close
  conn.close%>
</table>
</body></html>
```

5.6 ADO Add Reeords

We may use the SQL INSERT INTO eommand to adda record to a table in a database,

5.6.1 Add a Record to a Table in a Database

We want to add a new record to the Customers table in the data.mdb database, We first ereate a form that contains the fields we want to collect data from:

```
<html>
<body>
```

```
<form method="post" action="demo _add.asp">
<table>
<tr><td>CustomerID:</td><td><input name="custid"></td></tr>
<tr><td>Company Name:</td><td><input name="compname"></td></tr>
<tr><td>Contact Name:</td><td><input name="contname"></td></tr>
<tr><td> Address:</td><td><input name="add:ress"></td></tr>
<tr><td>City:</td><td><input name="city"><ltd></tr>
<tr><td>Postal Code:</td><td><input name="postcode"></td></tr>
<tr><td>Country:</td><td><input name="country"></td></tr>
<ltable>
<br/>
<input type="submit" value="Add New">
<input type="reset" value="Cancel">
</form>
</body>
</html>
```

When the user presses the submit button the form is sent to a .file, called "demo jıdd.aep". The "deaıo jıdd.asp" file contains the code that will add anew record to the Customers table:

```
<html><body>
<%
set conn=Server.CreateObject("ADODB.Connection")
conn.Provider="Microsoft.Jet.OLEDB.4.0"
conn.Open "c:/webdata/northwind.mdb"
sql="INSERT INTO customers (customerID,companyname,"
sql=sql & "contactname,address,city,postalcode,country)"
sql=sql & " VALUES "
sql=sql & "('" & Request.Form("custid") & "'/
sql=sql & "'" & Request.Form("compname") & "',"
sql=sql & "'" & Request.Form("contname") & "',"
sql=sql & "'" & Request.Form("address") & "',"
sql=sql & "'" & Request.Form("city") & "',"
sql=sql & "'" & Request.Form("postcode") & "',"
sql=sql & "'" & Request.Form("country") & "')l'
on error resume next
conn.Execute sql,recaffected
if err<>Othen
  Response.Write("No update permissions!")
else
  Response.Write("<h3>" & reca:ffected& "record added</h3>")
endif
conn.close
%>
</body>
</html>
```

Important

If you use the SQL INSERT command be aware ofthe following:

- If the table contains a primary key, make sure to append a unique, non-Null value to the primary key field (if not, the provider may not append the record, or an error occurs)
- If the table contains an AutoNumber field, do not include this field in the SQL INSERT command (the value ofthis field will be taken care of automatically by the provider)

5.6.2 What about Fields With no Data?

In a MS Access database, you can enter zero-length strings ('m) in Text, Hyperlink, and Memo fields IF you set the AllowZeroLength property to Yes.

Note: Not all databases support zero-length strings and may cause an error when a record with blank fields is added. It is important to check what data types your database supports.

5.7 ADO Objects

5.7.1 ADO Object Model

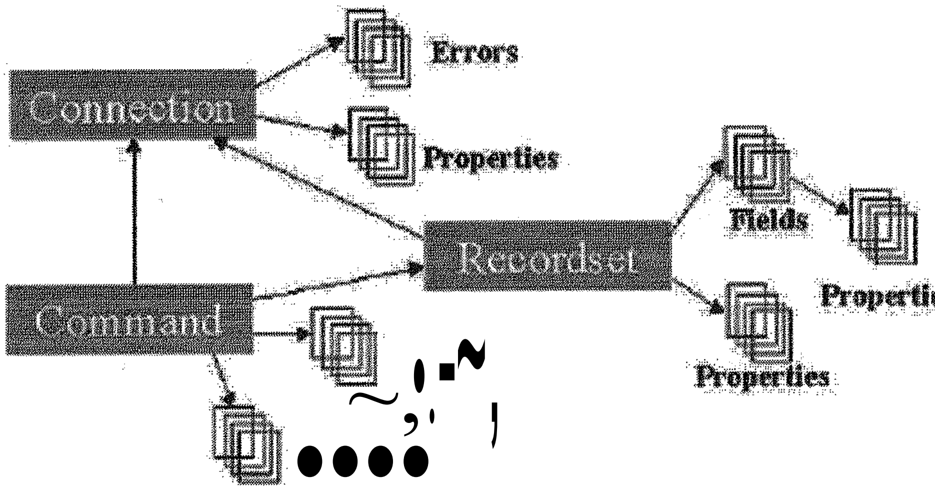


Figure 5.1 ADO ObjectModel

5.7.1.1 Command Object

The ADO Command object is used to execute a single query against a database. The query can perfonn actions like creating, adding, retrieving, deleting or updating records.

Ifthe query is used to retrieve data, thedata will bereturned asa RecordSetobjecL'fhis means that the retrieved data can be manipulated by properties, collections, methods, and events ofthe Recordset object.

The major feature of the Command object is the ability to use stored queries and procedures with parameters.

```
set objCommand=Server.CreateObject("ADODB.command")
```

Ceaneetloa

- Parameters: Contains all the Parameter objects ofa Command Object
- Properties: Contains all the Property objects ofa Command Object

5.7.1.2 Cennectlon Object

The ADO Connection Object is used to create an open connection to a data source, Through this connection, you can access and manipulate a database.

If you want to access a database multiple times, you should establish a connection using the Connection object. You can also make a connection to a database by passing a connection string via a Command or Recordset object. However, this type of connection is only good for one specific, single query.

```
set objConnection=Server:CreateObject("ADODB.connection")
```

Conaeetien

- Errors: Contains all the Error objects of the Connection object
- Properties: Contains all the Property objects of the Connection object

5.7.1.3 Recordset Objeet

The ADO Recordset object is used to hold a set of records from a database table. A Recordset object consist ofrecords and columns (fields).
In ADO, this object is the most important and the most used object to manipulate data from a database.

```
set objRecordset=Server.CreateObject("ADODB.recordset")
```

When you first open a Recordset, the current record pointer will point to the first record and the BOF and EOF properties are False, Ifthere are no records, the BOF and EOF property are true.

Recordset objeets can support two types of updating;

- Immediate updating - ali changes are written immediately to the database once you call the Update method.
- Batch updating - the provider will caehe multiple changes and then send them to the database with the Update Batch method.

in ADO there are four different cursor types definede

- Dynamic eursor - Allows you to see additions, changes, and deletions by other users.

- Key set cursor - Like a dynamic cursor, except that you cannot see additions by other users, and it prevents access to records that other users have deleted. Data changes by other users will still be visible,

- Statie eursor - Provides a static copy ofa recordset for you to use to find <lata or generate reports. Additions, changes, or deletions by other users will not be visible. This is the only type of cursor allowed when you open a client-side Recordset object.

- Forward-only eursor - Allows you to only scroll forward through the Recordset. Additions, changes, or deletions by other users will not be visible.

Conneetlon

- Fields: Indicates the number of Field objects in the Recordset object, and here there is a properties for fields also Contains all the Property objects fora Field object
- Properties: Contains all the Property objects in the Recordset object

CHAPTER 6. PERSONAL WEB PAGE DESIGN

6.1 Int:roduction

In my project, I am saved all the ASP applicaıion in one file (folder) that is accessible to the web server, So that the ASP script within will be processed correctly.

Inetpub / wwwroot / web folder

6.2 Run ASP on Your PC

6.2.1 InstaHing IIS on Windows. XP

If you are running Windows XP Professional on your computer you can install Microsoft's web server, İnternet In:formation Server (IIS) for free from the Windows XP Pro installation CD and configure it to run on your system by following the instructions belowr-

1. Place the Windows XP Professional CD.,Rom into your CD-Rom Drive,

2. Open 'Add/Remove Windows Components' found in 'Add/Remove Programs' in the'Ceatrel Panel'

3. Place a tick in the check box for 'Internet Information Services (IIS)' leaving all the default instal}ation settings intact.

4. ünce IIS is installed on your machine you can view your: heme page in a web browser by typing 'http:lllocalhost' (you can substitute 'localhost' forthe name of your computer) into the address bar of your web browser. Ifyou have not placed your web site into the default direetory you should now be looking at the IIS documentation.

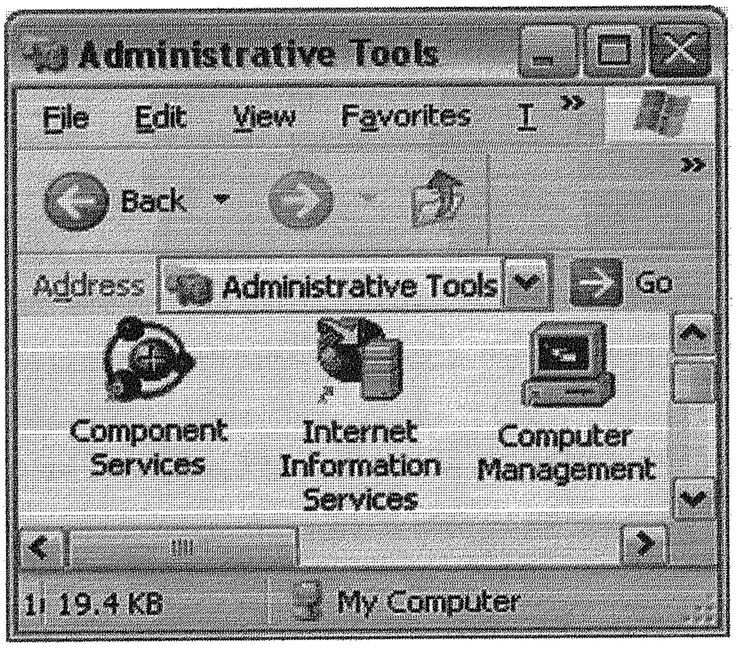
5. If you are not sure of the name of your computer right-click on the 'My Computer' icon on your desktop, seleet *'Properties'* from the shortcut menu, and click on the 'Cemputer Name' tab.

6. Your default webdireetory to place your web site in is 'C:\Inetpub\wwwroot', but if you don't want to over write the IIS documentation found in this directory you can set up your own virtual directory through the 'Iıternet Information Servlees' console.

7. The 'Internet Information Serviees' console can be found in the 'Administration Toels' in the 'Centrol Panel' under 'Performanee and Maintenance', if you do not have the control panel in Classic View.

Figure 6.1. Performance and Maintenance

8. Double-click on the 'Internet Ieformation Serviees' icon.


Administrative Tools
File Edit View Favorites T
Back
Address Administrative Tools Go
Component Services
Internet Information Services
Computer Management
1 19.4 KB
My Computer
Figure 6.2. Administrative Tools

ünce the 'Internet Infcrmation Services' console is open you will see any IIS web services you have running on your machine including the SMTP server and FTP server; if you chose to install them with IIS.

9. To adda new virtual directory right click on 'Default Web Site' and seleet 'New', followed by 'Virtual Direetory', from the drop down list.

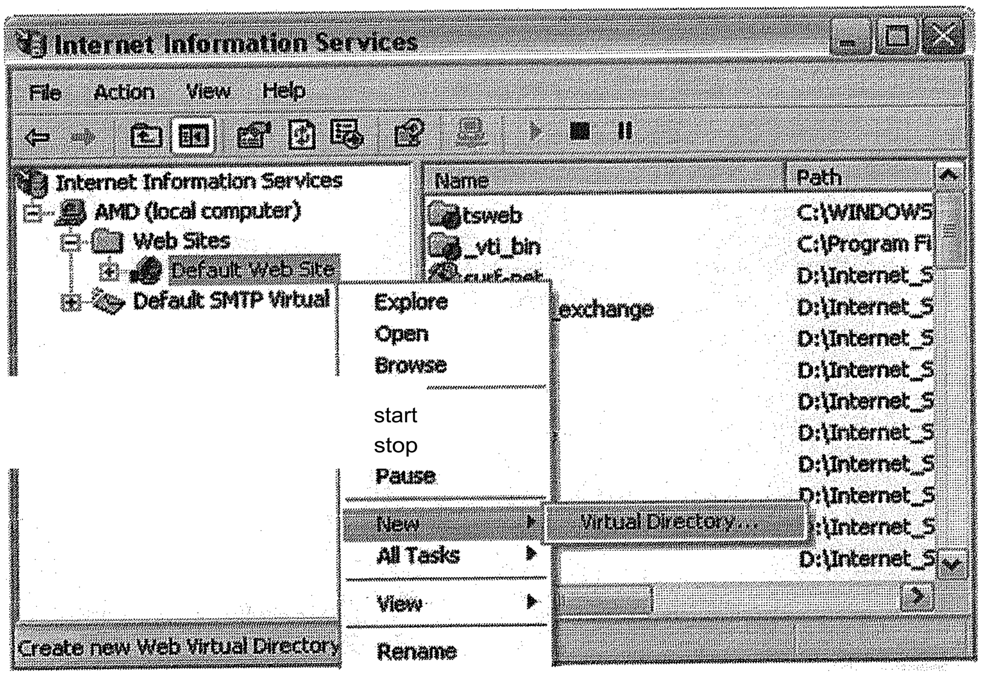


Figure 6.3. Intemet Information system (US)

7. Next you will see the 'Virtu.al Direcfory Creation Wizard' from the first screen click the' next' button,

9. You will then be asked to type in an 'Alias' by which you will access the virtual directory from your web browser (this is the name you will type into your web browser after 'localhost' to view any web pages you place in the directory).

10. Next you will see a 'Browse •••' button, click on this to select the directory your web site pages are in on your computer, after which eliek on the 'next' button to continue.

11. On the final part of the wizard you will see a series of boxes, if you are not worried about security then select them all, if you are and want to run ASP seripts then check the first two, followed by the *'next'* button.

12. Once the virtual directory is created you can view the web pages in the folder by typing 'http://locallıost/aliasName' (where 'aliasName' is, place the alias you called the virtual directory) into the address bar of your web browser (you can substitute 'localhost' for the name of your computer if you wish).

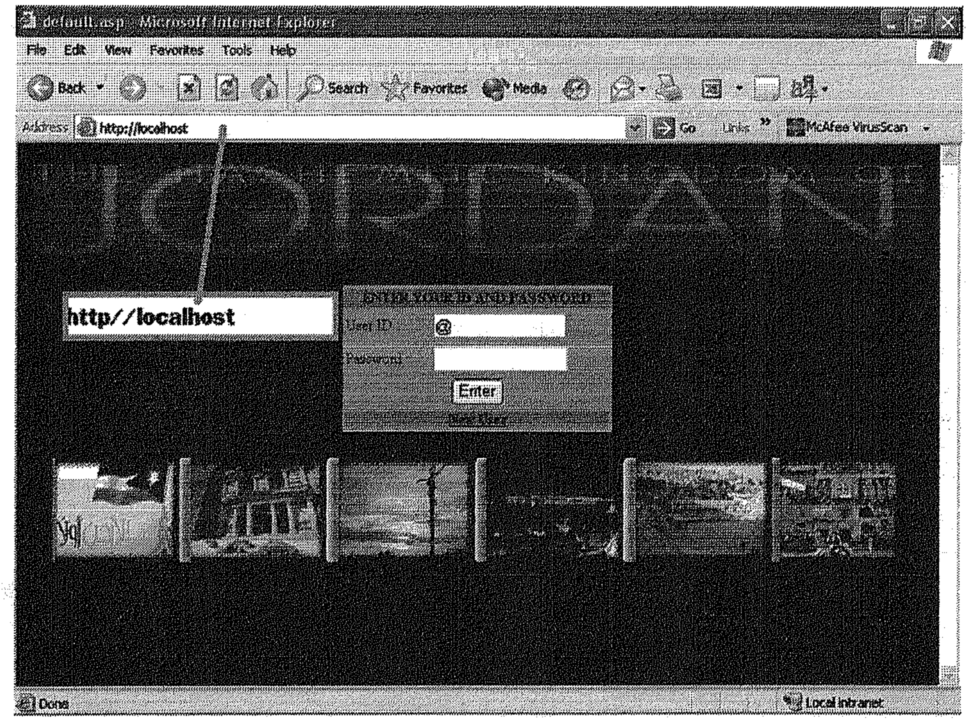


Figure 6.4. To put local host

6.2.2 Install PWS and run ASP on Windows 98

1. Open the Add-ons folder on your Windows98 CD, find the PWS folder and run the setup.exe file.

2. An Inetpub folder will be created on your harddrive. Open it and find the wwwroot folder.

3. Create a new folder, like "MyWebn, under wwwroot.

4. Use a text editcr to write some ASP code, save the file as "testl.asp" in the "MyWeb" folder,

5. Make sure your Web server is running - The installation program has added a new icon on your task bar (this is the PWS symbol). Click on the icon and press the Start button in the window that appears.
6. Open yeur browser and type in "http://localhost/MyWeb/testl.asp", to view your first ASP page.

6.3 Explanation my projeet

6.3.1 Bloek Diagram of my projeet

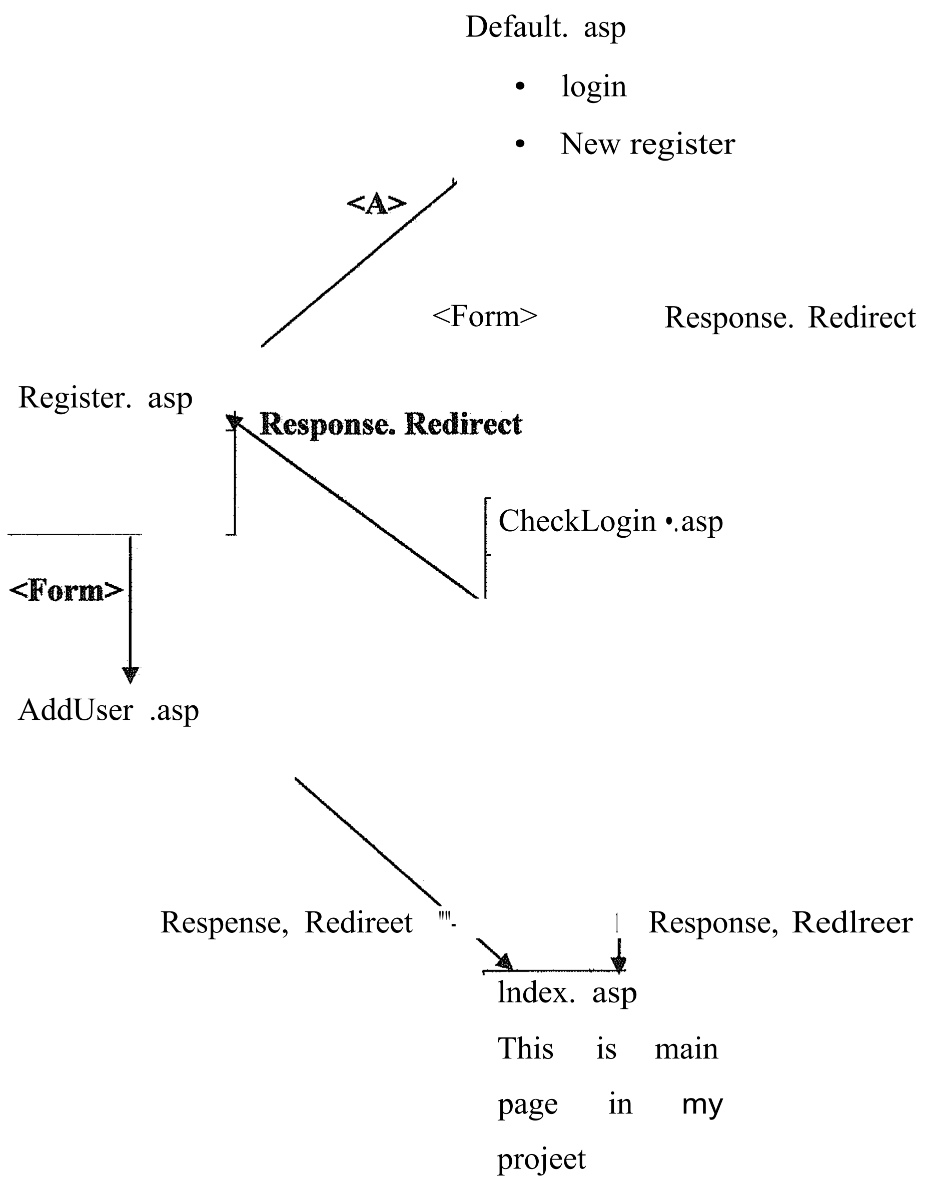


Figure 6.5. Block diagram to enter my web page

This block diagram use only for users to enter my web page (index . asp). directly if the user is registered, otherwise go to the New User Hyperlink, then (register . asp) to enter the necessary registration details,

6.3.2 Default.asp

So, our user arrives at the site and is presented with defaıılt.asp, which offers two options:

- If they're a first time user, they can register withthe system (by selection the New Register hyperlink).
- If they have visited the site before, they can use their email and password combination to log on to the system.

in this page (Defaııl t.asp) we are use some techniques for example <form> tag chapter 1 arıd this form has two input text and one buttan to goes the main page (index .asp) by using Action="URL" to connect with database by (Checklgin.asp) page then verifying the data from our database table (member.mdb)

There fore, if the user is register before, then that code as shown bellow gives the data from the user's to CheckLogin.asp page (as show in the diagram) by the fo:fm tag and name of text,

Text 1 Name	: EMail
Text 2 (Password) Name	: Password

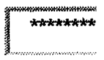
```
<form metlıod=" post" actlon=" ClıeckLogin.asp ">
   <table align="center" width.="30%"height="1%" bgcolor="#CC9900" >
 <tr bgcolor="#CC6633 ">
<th colspan="2">ENTER YOUR ID AND PASSWORD</th></tr>
<tr>
<td>User ID :</td> <td><input type=rtext" name="EMail" size=="13"
value="@"></td>
 </tr>
 <tr>
<td>Password :</td> <td><input type="password" name="Password"
size="15 "></td>
</tr>
 <tr>
<td colspan="2" align="center"><input type="submit" value="Enter"
size="20"></td>
```

```
</tr>
    </table>
  </form>
```

Then the users will be showing these input text:

ENTER YOUR ID AND PASSWORD

UserID:

Password: 

****

6.3.3 Checkl.eghı.asp

Contains ASP logic for checking the User ID and Password (from the form in. default.asp) against details contained in the database. This page has no user.interfac~.

Therefore; in. this page verifyinıg the data from our database table (PersonTable) by using ASP code as shown below

ASP code in CheckLogin.asp page

```
<% Diın strEMail, strPassword
  strEMail = Request("EMail")
  strPassword = Request("Password")
  DimrsUsers
  set rsUsers = Server.Createübject("ADODB.Recordset")
  strSQL ="SELECT * FROM Person WHERE EMailAddress ='" & strEMail & "';"
  rsUsers.Open strSQL, objConn
  IfrsUsers.EOF Then                                        ' User not (Ound
    Session("EMailAddress") = Request("EMail")
    IfRequest("SecondTry") = "True" then                   User's had two goes
      Response.Redirect "register.asp?NotFound=True"          ' - must register
    Else                                     ' Username wrong; password wrong
      Response.Redirect "default.asp?SecondTry=True"         ' - allow another go
    End If
  Else                                 'One or more users (Ound - checkpassword
While Not rsUsers.EOF
 IfUCase(rsUsers("Password"))     = UCase(strPassword) Then   'password matched
  Dim strName, strValue
  For Each strField in rsUsers.Fields
   strName = strField.Name                              'populate session variables
   strValue = strField.value
   Session(strName) = strValue
  Next
  Session("blnValidUser") = True
  Response.Redirect "index.asp"                                    'successful login
 Else
  rsUsers.MoveNext
 Endlf
Wend
Session("EMailAddress") = Request("EMail")                ' if we get this far then...
                                              '...password doesn't match any o{DB entries
IfRequest("SecondTry") = "True" then                      ' User's had two goes
 Response.Redirect "register.asp"                              ' - must reregister
Else                                            ' Username right: password wrong
 Response.Redirect "default.asp?SecondTry=True&WrongPW=True"
                                                              '- allow another go
Endlf
Endlf
%>
```

6.3.4 Colleetlng Registratiou Details

in order to allow a new user to register for first time, we will need to collect the user's personal deteils, check theit' password, and enter all the infortnation into the database. in order to manage this we will create two new pages:

- Register, asp will be responsible for eollecting the data from the user,
- AddUser • asp will take that data and add it to the database (Person table), and then pass the user on to index.asp

6.3.4.1 Regjster.asp

The purpose is contains a form that enables new users to enter the necessary registration details. Also to enable existing users to change their register details.

```
<HTML>
<HEAD>
<SCRIPT language="JavaScript">
<!--
 function VerifyData()
 {
   if (docum.ent.frmUser.Passwordvalue 1=
docum.ent.frmUser.VerifyPasswordvalue)
   {
    alert ("Your passwords do not mateh - please reenter");
    return false;
   }
   else
    return true;
 }
-->
</SCRIPT>
<TITLE>User Registration</TITLE>
</HEAD>
<body bgcolor="#6FOOOO">
<h2 align="center">New User Registration</h2>
<FORM ACTION="AddUser.asp" NAME=nfrmUser" METHOD=nPOST"
          onSubmit="retum VerifyData()">
 <TABLE BORDER=Oalign="center" bgcolor="#CC9900" width="50%">
   <TR>
    <TD WIDTH=40% ROWSPAN=l l>&nbsp;</TD>
<TD>E-Mail Address:</TD>
 <TD><INPUT TYPE="Text" NAME=nemail"
VALUE="<%=Session("EMailAddressfl)%>"SIZE="40"></TD>
   <!TR>
   <TR>
     <TD>Given   Naıne:</TD>
     <TD><INPUT   TYPE="Text"   NAME="GivenNaıne"
      VALUE="<%=   Session("GivenNaıne")%>"     SIZE="40"></TD>
   </TR>
   <TR>
     <TD>Faınily   Naıne:</TD>
     <TD><INPUT   TYPE="Text"   NAME="FaınilyNaıne"
     VALUE="<%=   Session("FaınilyNaıne")%>"     SIZE="40"></TD>
   </TR>
   <TR>
     <TD>Address:</TD>
     <TD><INPUT   TYPE="Text"   NAME="Addressl"
 VALUE="<%=   Session("StreetAddressl    ")%>"   SIZE="40"></TD>
   </TR>
   <TR>
     <TD>
</TD>
     <TD><INPUT   TYPE="Text"   NAME="Address2"
VALUE="<%=   Session("StreetAddress2")%>"     SIZE="40"></TD>
   </TR>
   <TR>
     <TD>City:</TD>
     <TD><INPUT   TYPE:;:;"Text" NAME="City"
VALUE="<%=   Session("City")%>"    SIZE="40"></TD>
   </TR>
   <TR>
     <TD>State:</TD>
     <TD><INPUT   TYPE="Text"   NAME="State"
VALUE="<%=   Session("State")%>"     SIZE="40"></TD>
   </TR>
   <TR>
     <TD>Postal   Code:</TD>
```

```
    <TD><INPUT   TYPE="Text"   NA.ME=ıırPostalCode"
     VALUE="<%= Session("Postal Codeıı)%>ııSIZE=n40"></ID>
   </TR>
   <TR>
    <ID>Country:</TD>
    <TD><INPUT TYPE="Text NAME="Country"
      VALUE="<o/o=Session("Country")%>"  SIZE="40"></TD>
   </TR>
   <TR>
    <TD>&nbsp;<P>Password:</TD>
    <TD VALIGN=bottom><INPUT TYPE="Password" NAME="Password"
        VALUE="<%= Session("Password") %>" SIZE="40"></TD>
   </TR>
   <TR>
    <TD>Verify Password:</TD>
    <TD><INPUT TYPE="Password" NAME="VerifyPassword"
 SIZE="40"></TD>
   </TR>
   <TR>
    <TD>
 </TD>
    <TD ALIGN=CENTER COLSPAN=2><BR>
       <INPUT TYPE="Submit" VALUE="Submit Registration">
          &nbsp;&nbsp;<INPUT TYPE="RESET"></TD>
   </TR>
  </TABLE>
 </FORM>
 </BODY>
 </HTML>
```

From the home page, click on the New Use hyperlink to view the registration page.

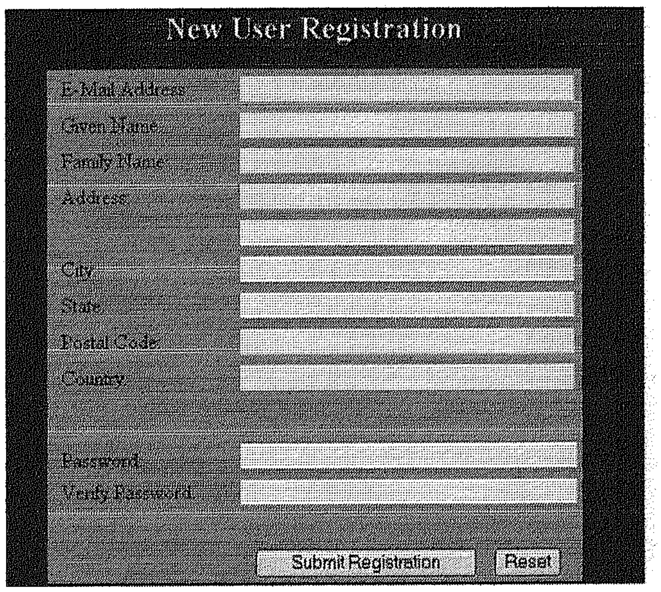


Figure 6.6 Register details (information about users)

6.3.4.1.1 How it works

There seems to be quite a lot of code here, but it's not too diffi.cult.The rtıairitaskof Register • asp is to present the user with a form, which they will use to submit their registration information. When the user has completed thje form, they press the Submit Registratfon buttan. At this stage, a client - side script is exeeuted to parse the vah.ıes of the Password and Verify Passwerd fields (to make sure they match). Ifthis.brief check is successful, contents of the form are submitted to AddUser • asp Which will performed thje database updates, as we will see shortly. ünce that script has completed, thje user will be automatically redirected to another page,

6.3.4.1.2 Funetkm of JavaScript (VerifyData)

Let's look a little more closely. The first interesting part of code is the client - side seript section, which we have plaeed near the top of the page. To ensure that the user entered the password that they intended, the system requires that they enter it twice - in the password and verify password fields on the form.

So the purpose of the VerifyDate() function is to compare these two values:

```
<SCRIPT language="JavaScript">
<!--
 function VerifyData()
 {
 if (document.frm.User.Passwordvalue != document.frm.User.VerifyPasswordvalue)
   {
     alert ("Your passwords do not match - please reenter");
     return false;
   }
   else
     return true;
 }
-->
</SCRIPT>
```

We have chosen to use JavaScript for our client+ side validation routines,<.1'ecause.it's compatible with a greater number of browsers. We have also chosen to perform this cheek on the client - side, rather than have the server validate the passM'orcl,. i.f the password don't match this saves us a round - trip to the server.

In this case, we display a message box, whieh informs the user of the problem and gives them another chance to complete the password fields. If the passwords do match, then the proeessing continues.

6.3.4.1.3The Relation between Funetion VerifyData ( ) and Form tag

The VerifyData ( ) client - side function is called at the time. the form· is submitted. We achieve this by adding the on.Submit to the <FORM> tag,
The onSubmit parameter identifies a client - side function that is to be called whenever the user submits the form:

```
<FORM ACTION="AddUser.asp" NAME="frm.User"METHOD="POST"
        onSubmit="return VerifyData()">
```

in this case, When the form is submitted, the VerifyDate ( ) executes and returns a result of either true or false (according to whether or not the values of the Password and Verify Password fields matched).

6.3.5 HendlsıgReglstretlon Detalls (AddUser. asp)

AddUser . asp is a bit different from most ASP script files, in that it doesn't have a user interface. The purpose is to take the informarion submitted by the form in the Register • asp page, and to put those values into the database. Based on the results of these database functions, the browser is directed to another page, where the user continues with the application.

Adding registration details to the database with AddUser . asp

```
<!--#include file="Clssfd;asp"-->
<%
 DimrsUsers
 Set rsUsers = Server.CreateObJect("ADODB.Recordset")
 rsUsers.Open "Person", objConn, adOpenForwardOnly, adLockOptiıriistic,
adCmdTable
 If Session("PersonID") <> "" Then                    ' currently logged-on user
  rsUsers.Filter = "PersonID = '" & Session("PersonID") & mıı
 Else                                                          'New session
  rsUsers.Filter = "EMailAddress ='" & Request.Form("email") & "'" & _
          "AND Password ='" & Request.Form("password") & "'ıı
  If rsUsers.EOF Then                                       'UserifôtfOund
   rsUsers.AddNew                                  , ... so adda new ret:ord
'  Else
                        'Email address and gasswordmtıtchedwithDBrecords -
                      ' In this case we'll allow this to update user's personal
details
  Endlf
 Endlf
                                           'write personal details to record
 rsUsers("EMailAddress") = Request.Form("email")
 rsUsers("Password") = Request.Form("password")
 rsUsers("FamilyName") = Request.Form("FamilyName")
 rsUsers("GivenName") = Request.Form("GivenName")
 rsUsers("StreetAddressl ") = Request.Form("Addressl ")
rsUsers("StreetAddress2")    = Request.Form("Address2")
rsUsers("City") = Request.Form("City")
rsUsers("Statell)= Request.Form("State")
rsUsers("PostalCode") = Request.Form("PostalCode")
rsUsers("Country") = Request.Form("Country")
rsUsers("Active") = True
rsUsers("LastLogin") = Now
rsUsers.Update                                          ' update the da.tabase

Dim strName, strValue                                   ' create session variables
For each strField in rsUsers.Fields
  strName = strField.Name
  strValue = strField.value
  Session(strName) = strValue
Next
 Session("blnValidUser") = True               'declare  that currentuser  isvalidated
 Response.Redirect "index.asp"
%>
```

Now we will create the include file that was called the file above. <!""- #include file="Clssfd. asp=->,

Then I am creating another file in our editor and enter the following code:

```
  <!-- METADATA TYPE="typelib"
          FILE="C:\Program Files\Common Files\System\ado\msado15.dll" -->
  <%
    DimobjConn
    Set objConn = Server.Createübject("ADODB.Connection")
    objConn.Open "Provider=Microsoft.Jet.OLEDB.4.0; " & _
            "Data Source= D:\web\database\member.mdb"

    IfSession("blnValidUser")  = True and Session("PersonID") = ""  Then
      Dim rsPersonIDCheck
    Set rsPersonIDCheck  = Server.CreateObject("ADODB.Recordset")
    Dim strSQL
    strSQL = "SELECT PersonID FROM Person " & _
          "WHERE EMailAddress ='" & Sessionf'EMailAddress")  & "';"
    rsPersonIDCheck.Open  strSQL, objConn
    If rsPersonIDCheck.EOF  Then
      Session("bln ValidU ser") = False
    Else
      Session("PersonID")  = rsPersonIDCheck("PersonID")
    Endlf
    rsPersonIDCheck. Close
    Set rsPersonIDCheck  = Nothing
  Endlf
 %>
```

That Clssfd • asp uses the ADO type library that we have used previously. But you will need to check that the patlı of this file on your ma.clıin.e.

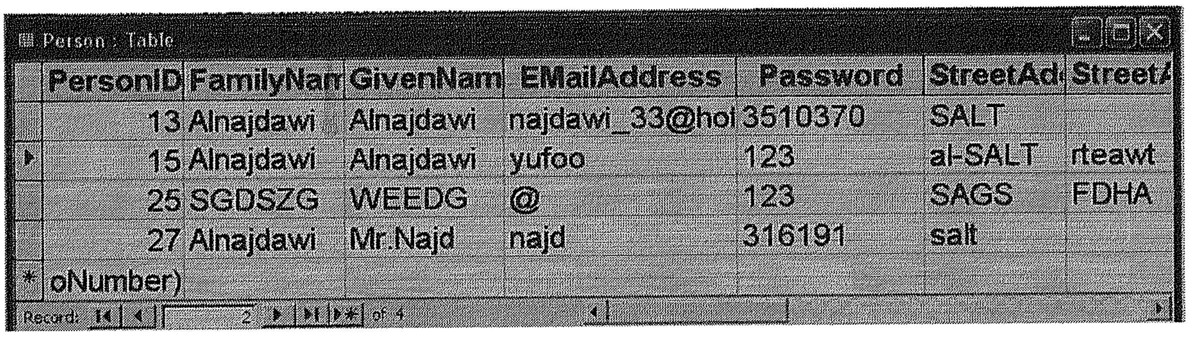
6.3.6 Tbe Person Table

The person table is used to store information about each user that is accessing the system. This information includes the Users ID (their family name and their given name) and address, as well as their e-mail address. In our application, each individual user will be identified uniquely in the database via a unique numeric identification number, which is generated by access and will be stored in the PersonalID field, In order to log in to the system, users will identify themselves by giving their E-mail address and password, Which are also stored in the Person table.

The structure of the person table is:

Filed Name	Data Type	Deseription
PersonID	Long	System - generated unique identifier
FamilyName	Text	User's family name (Required)
GivenName	Text	User's given name (Required)
EmailAddress	Text	User's e-mail address-used for login

		(Required)
Password	Text	User-defined Password-used for login (Required)
StreetAddress 1	Text	
StreetAddress	Text	
City	Text	
State	Text	
PostalCode	Text	
Country	Text	
Active	Boolean	Flag indicating that the user is currently an active user
LastLogin	Date/Time	Date and time of the last time this user logged into the application


Person : Table

PersonID	FamilyNar	GivenNam	EMailAddress	Password	StreetAd	Street
13	Alnajdawi	Alnajdawi	najdawi_33@hol	3510370	SALT	
15	Alnajdawi	Alnajdawi	yufoo	123	al-SALT	rteawt
25	SGDSZG	WEEDG	@	123	SAGS	FDHA
27	Alnajdawi	Mr.Najd	najd	316191	salt	
oNumber)						

Record: 2 of 4

Figure 6.7 Table for users

CONCLUSION

During the point at the end of my projeot ithal using clever programming techniques and simple design, we can make a veiy Wellörğamze&wehpages so that the user can be interact easily. There are many teclmiqties fôt tfıe/web designing, that technique used is Active Server Page (ASP) and JavaScript.

The advantage of ASP file can contain text, HTMUtags~drsc~~ts.~c.npts~ an ASP file are executed on the server. In addition, we can do to execute th.e connection with the server and send only report to the browser.

The advantage of JavaScript, we can call simple functions in. liead sectiôıiand body section to make ourweb site tike clock, date, animation, ect...

From the Database, ADO can be used to access databases from ourweb.pağes. The ADO Connection Object is used to create an open coım:ectiôn.foi<a" da.ta source. Through this connection, we can access and manipulate a database. We carı sa.ve the memory, that is we use simple database, that using many infonnation to rıaking connection. We come across the use of database in web site.

The final design in web design is never be the final. A never is always need-to go further and future

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