NEAR EAST UNIVERSITY

Faculty of Economics and Administrative Sciences

Department of Computer Information Systems

PETROL STATION AUTOMATION SYSTEM

Graduation Project
CIS – 400

Betül Beyza APAYDIN

Assist. Prof. Dr Yalçın AKÇALI

Nicosia - 2009
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Finally, I would like to express my gratitude to Near East University for the scholarship that made the work possible."
ABSTRACT

The Project is Petrol Station Automation System. This system is a simple and useful programme which is written for petrol stations with the help of this programme, limitless customer can be identified. Also, the changes of prices can be applied for customers immediately. This is a useful and special and handy programme. It is a little programme in which stock petrol, money input and outputs and employees can be followed.

Before I analyzed the Petrol Stations when I started this project. At the end of this analysis, I see to run into towards these problems. I think to find a best solutions these problems.

I choose this project because I saw that the petrol station operations in Turkey some petrol station are manuel and go very slow. Every petrol station available a pumper pointer. But also fit change the worker to write and to collect sells the petrol between the working hours. Also this form to make the mistakes and the account too few or too many probability to high. On the other hand, some firm to buy petrol after they will pay whole at the end of month. The petrol station to write notebook these firms payment information. This notebook to be lost or forget to register probability to high. The petrol station automation system, aims to provide easier works or processes for people who does petrol commercial job. This petrol station automation system is easy way for people.
INTRODUCTION

In the easy years, when people make buying or selling, they have to hold all informations related with this process on the notebook. However they have to do all calculations as manuel. Because of this cause, many calculation errors or missing information is occurred. After this period it is started to keep the information in the computer. But now it is started to store these information in database by using programs. Everything includes in our program. Program kept customer information, stock information, selling and buying process, supplier information and also computing of these automatically then employee informations. I mean this program answered to every need of people.

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The petrol station system is performance, information and data, economics, control, efficiency, and service to customers and employees will improve.
For the Official User Type;

The Main Process Performed in the Petrol Station Automation System:
1) Customer Process
2) Employee Process
3) Supplier Process
4) Buying Process
5) Selling Process
6) Stock Process
7) Reports
8) Application
9) Settings
10) Exit

The Subprocesses Performed by “Customer Process” process are:
1) Add
2) Delete
3) Update
4) Search

The Subprocesses Performed by “Customer Process Search” process are:
1) Searching by PlateID

The Subprocesses Performed by “Employee Process” process are:
1) Add
2) Delete
3) Update
4) Search

The Subprocesses Performed by “Employee Process Search” process are:
1) Searching by Employee Name and Surname
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  3) Games

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The Subprocesses Performed by “Settings Hardware Settings” process are:

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DESIGN OF THE SYSTEM
The minimum requirements of the system are as follows;

- Intel Pentium III Processor
- 500 MHz
- 128 MB of RAM
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- 14" Monitor
- Microsoft 98
- CD-ROM

The recommended requirements of the system are as follow;

- Intel Core 2 Duo Processor
- 2.0 GHz
- 2 GB of RAM
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- 17" Monitor
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- Ethernet Card

I used Delphi programming language for writing this Project and Access database for keeping the data.

Besides, to be able to run this program, Delphi has Installshield Express Wizard that encodes the program and gives the execution of the program to the user.
PETROL STATION AUTOMATION SYSTEM

1-) PROJECT IDENTIFICATION AND SELECTION

Aim of The Project:

Petrol Station Automation System aims to provide easier works or processes for people who does petrol commercial job. This automation system is easy and best way and to provide a much more comfortable inspection environment by obtaining the income, expenses and stock control. This system has some control mechanism during the process.

This system is usable, easiness and flexibility that the new system wishes to bring the users and corrections.

Project Boundries:

1) The Profit center as a whole can experience improved performance because less human error is possible as a result of the now automated system. More focus can be placed on sales and marketing to fuel customers as well as other job functions not related to the billing of accounts and the management of the fuel price.

2) The employee cards to hold employee information, who and when the employees sell the customer.

3) Using the database this system will improve the storage of the data and allow for many convenient ways to retrieve data and transform it into meaningful information. Utilizing the system to monitor profit margin and remaining up to date with the competitive fuel station can help to increase profits therefore improving economics.

4) Designing the petrol station with a password protection mechanism and a web interface with built in validation enhances control of data and security. The system also maintains an elevated level of service to customers by providing an easy to understand printed billing statement and the availability of customer history records. The records may be useful to customers and aid the Fuel center in negotiating competitive fuel discounts. Automation contributes to better efficiency along with the web interface design of the system. This design improves communication of data by reducing the wait time for sales and discount reports.
The Resource Limits:

The budget of the petrol station is very limited because it is a petrol station support by the petrol station owners. However the system will be expensive and some of the users in the petrol station may be sent to computer courses.

2-) PROJECT INITIATION AND PLANNING

Technical Feasibility

This system is technically feasible because the solution is technically practical in that it does not require a great deal of resources unavailable to the Fuel Island profit center. No additional hardware is needed. The center currently uses a back office computer running the Window XP platform to store the customer data in Microsoft Excel spreadsheet format. Microsoft Word is used to generate billing statements. A web browser is installed and a high speed Internet connection available. As the developer of the system I have the technical expertise to complete the project given the knowledge I have acquired during the database systems course along with knowledge of web development acquired outside of university course work. Technical feasibility examines if the solution is technically practical and if the developer has the technical expertise to design and build the solution.

Operational Feasibility

This system is operational feasible because it fulfills the user’s current requirement such as adding, deleting, and modifying all aspects of customer information, generating daily sales and profit reports, and generating customer billing statements and receivable notices. The system will change the user’s environment because it will waste less paper, add organization, and speed data retrieval time. As of this point in the development process the users feel the system will have a positive impact on their organization. More feedback will be acquired throughout development and as a prototype is developed and tested.

Operational feasibility reveals how the solution will fulfill the user’s current requirements for the job function, how the solution will positively change the user’s work environment, and how users feel about the solution.
Economical Feasibility

The system is economical feasible because as mentioned before no additional hardware is needed. The software Caging will be installed to provide the like environment. All of these software applications are open source and can be obtained at no charge.

Economical feasibility determines if the solution is cost-effective and schedule feasibility assesses if the solution can be designed and implemented within an acceptable time period.

Schedule Feasibility

When evaluating schedule feasibility and considering the amount of work required bringing the project to completion I am confident the solution can be designed and implemented within the allotted time. A Gantt chart is included at the end of this document describing the details of the projected completion time frame.

Risk Feasibility

The risk feasibility measures the probability of a successful implementation using the technology I am confident the project will be completed favorably because I have worked on the development of a team database project using similar technology. Also following diligently to the approach put forth in the petrol projects course offers an enhanced chance of successful completion.

This system's risk feasibility measures the probability of a successful implementation using the technology and approach put forth in the solution.

3-) ANALYSIS

The Requirements Determination:

The requirements made by the users are follows:

- To increase the speed of operations
- To prevent the loss of data
- To prevent the data duplications
- To provide easy and quick data access
- To prevent the chaos caused by the increasing number of customers
To restrict data access with the means of the system security (password entry)

The Existing System’s Capabilities:

- The petrol station work a manual system. All of the documents are held in hand.
- First of all, customers pays the petrol fee unless she/he is not buying. There is a pay-office official for this process.
- The next process is every petrol station available a pumper pointer. But also fit change the worker write and to collect sells the petrol between the working hours. Also this form to make the mistakes and the account too few or too many probability to high.
- The last process is some firms to buy petrol after they will pay whole at the end of month. The petrol station’s employees to write a notebook these firms payment information. This notebook to be lost or forget to register probability to high.

New System Providences:

- The new system will only be accessed by the authorized users. This will provide more secured and accurant operations. The employees’ individual information will only entered or changed by the registration official. The other users in the system will only be able to see this information.
- All data will be kept in computers, therefore problems of storing customers information will be solved. Also the data for each customers will be kept indivually, members of a family will be separated in the system.
- The employees to write a computer the fit start and finish hours. And the computer to compute between the start and finish hours whole sells petrols. Then the computer to show the result.
- Every customers to buy petrol when the petrol station will give a bill and same time this information to write a customer’s account. Also at the end of month, customer will pay whole payment to show total of results also computer.
- The new system will be reflecting the price changes to customers, detailed stock operations and to be classify according to kind of operations, recording the buying and selling operations and their reports, showing the level of the tone of
petrol and open oil as a graphics, to see the entire current movements of the
customer in only one form, to report the entire record movements between the 2
dates, to recording of the petrol prices an easy set up practical study and to
detailed usage file which explains the usage of the programme step by step of
this system.

REQUIREMENT STRUCTURING

THE PROCESSES:

Password Entry: There are only one type of users in this system users. These users
can access the system with own password and usernames. For this, first of all, the new
users should be registered to the system with the registration password and employee
number given by the manager.

1. **Customer Process:** We enter for the first time add a new customer specific
information and the customer will buy how many litres and pat the money.
Delete necessary customer information. The other hand, update the customer
information. The last one searching a customer by plateID.

2. **Employee Process:** We enter for the first time add a new employee
information, salary information, beginning date of the job and every days start
and finish the job time. Delete necessary employee information. The other hand,
update the employee information. The last one searching a employee by a name
and surname, searching by employeeID, searching by employee salary.

3. **Supplier Process:** We enter for the first time add a new supplier
information, salary information. Delete necessary supplier information. The
other hand, update the supplier information. The last one searching a supplier by
a company name and searching by a supplierID.
4. **Buying Process:** We enter for the first time add to buying a new petrol type in a depot. Delete necessary buying information. The other hand, update to buying information. The last one searching buying a by supplierID, searching buying by a payment type, searching by a buying date and searching by buying petrol type.

5. **Selling Process:** We enter for the first time add to selling a petrol type in a pumper. Delete necessary selling information. The other hand, update to selling information. The last one searching selling a by pumper no, searching by a plateID, searching selling date and searching by a selling petrol type.

6. **Stock Process:** This process controlling the inventory. We enter for the first time add to buying a new petrol type in a depot and delete to selling a petrol type in a pumper. Update stock information. Searching stock by a petrol type.

7. **Reports:** This process is reporting all of the others processes information.

8. **Application:** This process three parts of system applications. Office applications are such as word, excel and power point. Windows applications are such as notepad, wordpad, calculate and internet explorer. Games are such as solitaire, pinball and hearts.

9. **Settings:** This process two parts of system settings. Program settings make company database, reload database, company information and set date and time. Hardware settings make mouse, keyboard, printer and volume control.

10. **Exit:** The last process is exit the program.
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- To prevent the data duplications
- To provide easy and quick data access
- To prevent the chaos caused by the increasing number of customers
• To restrict data access with the means of the system security (password entry)

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• The last process is some firms to buy petrol after they will pay whole at the end of month. The petrol station’s employees to write a notebook these firms payment information. This notebook to be lost or forget to register probability to high.

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customer in only one form, to report the entire record movements between the 2
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users should be registered to the system with the registration password and employee
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Delete necessary customer information. The other hand, update the customer
information. The last one searching a customer by plateID.

2. Employee Process: We enter for the first time add a new employee
information, salary information, beginning date of the job and every days start
and finish the job time. Delete necessary employee information. The other hand,
update the employee information. The last one searching a employee by a name
and surname, searching by employeeID, searching by employee salary.

3. Supplier Process: We enter for the first time add a new supplier
information, salary information. Delete necessary supplier information. The
other hand, update the supplier information. The last one searching a supplier by
a company name and searching by a supplierID.
4. **Buying Process:** We enter for the first time add to buying a new petrol type in a depot. Delete necessary buying information. The other hand, update to buying information. The last one searching buying a by supplierID, searching buying by a payment type, searching by a buying date and searching by buying petrol type.

5. **Selling Process:** We enter for the first time add to selling a petrol type in a pumper. Delete necessary selling information. The other hand, update to selling information. The last one searching selling a by pumper no, searching by a plateID, searching selling date and searching by a selling petrol type.

6. **Stock Process:** This process controlling the inventory. We enter for the first time add to buying a new petrol type in a depot and delete to selling a petrol type in a pumper. Update stock information. Searching stock by a petrol type.

7. **Reports:** This process is reporting all of the others processes information.

8. **Application:** This process three parts of system applications. Office applications are such as word, excel and power point. Windows applications are such as notepad, wordpad, calculate and internet explorer. Games are such as solitaire, pinball and hearts.

9. **Settings:** This process two parts of system settings. Program settings make company database, reload database, company information and set date and time. Hardware settings make mouse, keyboard, printer and volume control.

10. **Exit:** The last process is exit the program.
CUSTOMER

Customer Data
Customer Order
Payment
Customer Bill

PETROL STATION INFORMATION SYSTEM

Salary
Employee Data
Purchase Invoice
Petrol
Payment Supply
Supplier Order

SUPPLIER

Petrol

MANAGER

Reports(*)
1) Customer Information
2) Stock Information
3) Supplier Information
4) Accounting Information
5) Employee Information
DETAIL (Level-1) DFD For PROCESS 2 (STOCK PROCESS)

CUSTOMER

2.1 Accepted Customer Demand Information

2.2 Prepare Sold Petrol Information

SUPPLIER

2.3 Prepare Purchase Petrol Information

StOCK FILE

Customer Demand

Customer Petrol Demand

Petrol List Sold

Petrol Sold

Petrol

Purchase Petrol

Purchase Order Petrol List

Stock level controls

Sold Petrol Knowledge

Purchase Petrol Knowledge
DETAIL (Level-1) DFD For PROCESS 4 (SUPPLIER PROCESS)

SUPPLIER

Supplier Order

4.1 Update and Delete Supplier Information

Supplier Record

SUPPLIER FILE

4.2 Checking the Purchasing Petrol

Supplier Knowledge

Stock Level Control

Purchasing Petrol List Control
DETAIL (Level-1) DFD For PROCESS 6 (EMPLOYEE PROCESS)

- EMPLOYEE
- Employee Data
- 6.1 Update and Delete Employee Information
- Employee Record
- Employee Knowledge
- EMPLOYEE FILE
- 6.2 Controlling Sold Employee Petrol
- Sold Petrol
## Database Design

### Table Customer:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Data Type</th>
<th>Field Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLATE_ID</td>
<td>CHAR</td>
<td>9</td>
</tr>
<tr>
<td>NAME</td>
<td>CHAR</td>
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</tr>
<tr>
<td>SURNAME</td>
<td>CHAR</td>
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<tr>
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<tr>
<td>ADDRESS</td>
<td>CHAR</td>
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<tr>
<td>GSM</td>
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<tr>
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</thead>
<tbody>
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<td></td>
</tr>
<tr>
<td>NAME</td>
<td>CHAR</td>
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</tr>
<tr>
<td>SURNAME</td>
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</tr>
<tr>
<td>ADDRESS</td>
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</tr>
<tr>
<td>GSM</td>
<td>CHAR</td>
<td>15</td>
</tr>
<tr>
<td>EMAIL</td>
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<tr>
<td>POSITION</td>
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<tr>
<td>HIREDATE</td>
<td>DATE/TIME</td>
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<td>EXPLAIN</td>
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**Table Supplier:**

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**Table Buy:**

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<tr>
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<tr>
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<tr>
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<td>CURRENCY</td>
<td></td>
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<tr>
<td>LITER</td>
<td>NUMBER</td>
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</tr>
<tr>
<td>PAYMENTTYPE</td>
<td>CHAR</td>
<td>15</td>
</tr>
<tr>
<td>KDV</td>
<td>NUMBER</td>
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</tr>
<tr>
<td>DATE</td>
<td>DATE/TIME</td>
<td></td>
</tr>
<tr>
<td>TIME</td>
<td>DATE/TIME</td>
<td></td>
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</table>
### Table Sales:

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</thead>
<tbody>
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<td>AUTO NUMBER</td>
<td></td>
</tr>
<tr>
<td>PLATEID</td>
<td>CHAR</td>
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</tr>
<tr>
<td>EMPLOYEEID</td>
<td>NUMBER</td>
<td></td>
</tr>
<tr>
<td>PUMPERNO</td>
<td>NUMBER</td>
<td></td>
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<tr>
<td>PETROLTYPE</td>
<td>CHAR</td>
<td>15</td>
</tr>
<tr>
<td>TOTAL</td>
<td>CURRENCY</td>
<td></td>
</tr>
<tr>
<td>LITER</td>
<td>NUMBER</td>
<td>6</td>
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<tr>
<td>PAYMENTTYPE</td>
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<td>KDV</td>
<td>NUMBER</td>
<td>10</td>
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<tr>
<td>DATE</td>
<td>DATE/TIME</td>
<td></td>
</tr>
<tr>
<td>TIME</td>
<td>DATE/TIME</td>
<td></td>
</tr>
</tbody>
</table>

### Table Stock:

<table>
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<th>Field Name</th>
<th>Data Type</th>
<th>Field Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>PETROLTYPE</td>
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<td>15</td>
</tr>
<tr>
<td>LITER</td>
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<tr>
<td>UNITPRICE</td>
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</tr>
<tr>
<td>CAPACITY</td>
<td>NUMBER</td>
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</tbody>
</table>
CUSTOMER PROCESS

Submenu
1-Add a new customer
2-Delete customer
3-Update customer information
4-Search customer

Select your choice

Selection=1

Y -> 1.1
N -> Selection=2

Y -> 1.2
N -> Selection=3

Y -> 1.3
N -> Selection=4

Y -> 1.4
N -> 1
29
SEARCHING CUSTOMER INFORMATION BY PlateID

1.4.1

Enter a PlateID

Search

No Found

Y

No customer in this PlateID found

N

Show list of customer information

1
EMPLOYEE INFORMATION

Submenu
1-Add a new employee
2-Delete employee
3-Update employee information
4-Search employee

Select your choice

Selection=1
Y → 2.1
N

Selection=2
Y → 2.2
N

Selection=3
Y → 2.3
N

Selection=4
Y → 2.4
N

2
SEARCHING EMPLOYEE INFORMATION

2.4

Submenu

1-Search by employee name and surname
2-Search by employeeid
3-Search by salary

Select your choice

Selection=1

Y → 2.4.1
N

Selection=2

Y → 2.4.2
N

Selection=3

Y → 2.4.3
N

2
SEARCHING EMPLOYEE INFORMATION BY Name and Surname

2.4.1

Enter Employee Name and Surname

Search

No Found

Show list of employee information

No employee in this name and surname

2
SEARCHING EMPLOYEE INFORMATION BY EmployeeID

2.4.2

Enter EmployeeID

Search

No Found

Show list of employee information

2
SUPPLIER PROCESS

1-Add a new supplier
2-Delete supplier
3-Update supplier information
4-Search supplier

Select your choice

Selection=1

Y
3.1

N

Selection=2

Y
3.2

N

Selection=3

Y
3.3

N

Selection=4

Y
3.4

N

3
SEARCHING SUPPLIER INFORMATION

3.4

Submenu
1-Search by company name
2-Search by supplierid

Select your choice

Selection=1

Y → 3.4.1
N

Selection=2

Y → 3.4.2
N

3
SEARCHING SUPPLIER INFORMATION BY Company Name

3.4.1

Enter Company Name

Search

No Found

Y

No supplier in this company name

N

Show list of supplier information

3
SEARCHING SUPPLIER INFORMATION BY SupplierID

3.4.2

Enter SupplierID

Search

No Found

Y

No supplier in this supplierid

N

Show list of supplier information

3
BUYING PROCESS

1. Add a new buying
2. Delete buying
3. Update buying information
4. Search buying

Select your choice

Selection=1

Y → 4.1

N

Selection=2

Y → 4.2

N

Selection=3

Y → 4.3

N

Selection=4

Y → 4.4

N
SEARCH BUYING INFORMATION

Submenu
1- Search by SupplierID
2- Search by Payment Type
3- Search by Buying Date
4- Search by Petrol Type

Select your choice

Selection=1

Y → 4.4.1
N

Selection=2

Y → 4.4.2
N

Selection=3

Y → 4.4.3
N

Selection=4

Y → 4.4.4
N

4
NEAR EAST UNIVERSITY

Faculty of Economics and Administrative Sciences

Department of Computer Information Systems

PETROL STATION AUTOMATION SYSTEM

Graduation Project
CIS – 400

Betül Beyza APAYDIN

Assist. Prof. Dr Yalçın AKÇALI

Nicosia - 2009
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Third, I would also like to thank all my friends for their advice and support.

Finally, I would like to express my gratitude to Near East University for the scholarship that made the work possible."

1
ABSTRACT

The Project is Petrol Station Automation System. This system is a simple and useful programme which is written for petrol stations with the help of this programme, limitless customer can be identified. Also, the changes of prices can be applied for customers immediately. This is a useful and special and handy programme. It is a little programme in which stock petrol, money input and outputs and employees can be followed.

Before I analyzed the Petrol Stations when I started this project. At the end of this analysis, I see to run into towards these problems. I think to find a best solutions these problems.

I choose this project because I saw that the petrol station operations in Turkey some petrol station are manuel and go very slow. Every petrol station available a pumper pointer. But also fit change the worker to write and to collect sells the petrol between the working hours. Also this form to make the mistakes and the account too few or too many probability to high. On the other hand, some firm to buy petrol after they will pay whole at the end of month. The petrol station to write notebook these firms payment information. This notebook to be lost or forget to register probability to high. The petrol station automation system, aims to provide easier works or processes for people who does petrol commercial job. This petrol station automation system is easy way for people.
INTRODUCTION

In the easy years, when people make buying or selling, they have to hold all informations related with this process on the notebook. However they have to do all calculations as manuel. Because of this cause, many calculation errors or missing information is occurred. After this period it is started to keep the information in the computer. But now it is started to store these information in database by using programs. Everything includes in our program. Program kept customer information, stock information, selling and buying process, supplier information and also computing of these automatically then employee informations. I mean this program answered to every need of people.

Before I analyze this project and decision analysis is triggered by the candidate solution of the project, which is a solution to an opportunity that can be viewed as a chance to improve the organization it is created for even in the absence of an identified problem in the business’s current system.

The petrol station system is performance, information and data, economics, control, efficiency, and service to customers and employees will improve.
For the Official User Type;

The Main Process Performed in the Petrol Station Automation System:

1) Customer Process  
2) Employee Process  
3) Supplier Process  
4) Buying Process  
5) Selling Process  
6) Stock Process  
7) Reports  
8) Application  
9) Settings  
10) Exit

The Subprocesses Performed by “Customer Process” process are:

1) Add  
2) Delete  
3) Update  
4) Search

The Subprocesses Performed by “Customer Process Search” process are:

1) Searching by PlateID

The Subprocesses Performed by “Employee Process” process are:

1) Add  
2) Delete  
3) Update  
4) Search

The Subprocesses Performed by “Employee Process Search” process are:

1) Searching by Employee Name and Surname  
2) Searching by EmployeeID  
3) Searching by Salary
The Subprocesses Performed by “Supplier Process” process are:
1) Add
2) Delete
3) Update
4) Search

The Subprocesses Performed by “Customer Process Search” process are:
1) Searching by Company Name
2) Searching by SupplierID

The Subprocesses Performed by “Buying Process” process are:
1) Add
2) Delete
3) Update
4) Search

The Subprocesses Performed by “Buying Process Search” process are:
1) Searching by SupplierID
2) Searching by Payment Type
3) Searching by Buying Date
4) Searching by Buy Petrol Type

The Subprocesses Performed by “Selling Process” process are:
1) Add
2) Delete
3) Update
4) Search

The Subprocesses Performed by “Selling Process Search” process are:
1) Searching by Pumper No
2) Searching by PlateID
3) Searching by EmployeeID
4) Searching by Selling Date
5) Searching by Selling Petrol Type
The Subprocesses Performed by “Stock Process” process are:
1) Add
2) Delete
3) Update
4) Search

The Subprocesses Performed by “Application” process are:
1) Office Applications
2) Windows Applications
3) Games

The Subprocesses Performed by “Application Office Applications” process are:
1) Word
2) Excel
3) Powerpoint

The Subprocesses Performed by “Application Windows Applications” process are:
1) Notepad
2) Wordpad
3) Calculator
4) Internet Explorer

The Subprocesses Performed by “Application Games” process are:
1) Solitaire
2) Mshearts
3) Chess
4) Minesweeper
5) Spider
6) Freecell

The Subprocesses Performed by “Settings” process are:
1) Program Settings
2) Hardware Settings
The subprocesses performed by "Settings Program Settings" process are:

1) Backup Database
2) Reload Database
3) Company Information
4) Set Date & Time

The subprocesses performed by "Settings Hardware Settings" process are:

1) Mouse
2) Keyboard
3) Printer
4) Volume Control
DESIGN OF THE SYSTEM
EXPLANATION

The minimum requirements of the system are as follows;

- Intel Pentium III Processor
- 500 MHz
- 128 MB of RAM
- 30 GB Harddisk
- 14" Monitor
- Microsoft 98
- CD-ROM

The recommended requirements of the system are as follow;

- Intel Core 2 Duo Processor
- 2.0 GHz
- 2 GB of RAM
- 250 GB Harddisk
- 17" Monitor
- DVD-RW
- Ethernet Card

I used Delphi programming language for writing this Project and Access database for keeping the data.

Besides, to be able to run this program, Delphi has Installshield Express Wizard that encodes the program and gives the execution of the program to the user.
PETROL STATION AUTOMATION SYSTEM

1-) PROJECT IDENTIFICATION AND SELECTION

Aim of The Project:

Petrol Station Automation System aims to provide easier works or processes for people who does petrol commercial job. This automation system is easy and best way and to provide a much more comfortable inspection environment by obtaining the income, expenses and stock control. This system has some control mechanism during the process.

This system is usable, easiness and flexibility that the new system wishes to bring the users and corrections.

Project Boundries:

1) The Profit center as a whole can experience improved performance because less human error is possible as a result of the now automated system. More focus can be placed on sales and marketing to fuel customers as well as other job functions not related to the billing of accounts and the management of the fuel price.

2) The employee cards to hold employee information, who and when the employees sell the customer.

3) Using the database this system will improve the storage of the data and allow for many convenient ways to retrieve data and transform it into meaningful information. Utilizing the system to monitor profit margin and remaining up to date with the competitive fuel station can help to increase profits therefore improving economics.

4) Designing the petrol station with a password protection mechanism and a web interface with built in validation enhances control of data and security. The system also maintains an elevated level of service to customers by providing an easy to understand printed billing statement and the availability of customer history records. The records may be useful to customers and aid the Fuel center in negotiating competitive fuel discounts. Automation contributes to better efficiency along with the web interface design of the system. This design improves communication of data by reducing the wait time for sales and discount reports.
The Resource Limits:

The budget of the petrol station is very limited because it is a petrol station support by the petrol station owners. However, the system will be expensive and some of the users in the petrol station may be sent to computer courses.

2-) PROJECT INITIATION AND PLANNING

Technical Feasibility

This system is technically feasible because the solution is technically practical in that it does not require a great deal of resources unavailable to the Fuel Island profit center. No additional hardware is needed. The center currently uses a back office computer running the Window XP platform to store the customer data in Microsoft Excel spreadsheet format. Microsoft Word is used to generate billing statements. A web browser is installed and a high speed Internet connection available. As the developer of the system I have the technical expertise to complete the project given the knowledge I have acquired during the database systems course along with knowledge of web development acquired outside of university course work. Technical feasibility examines if the solution is technically practical and if the developer has the technical expertise to design and build the solution.

Operational Feasibility

This system is operational feasible because it fulfills the user's current requirement such as adding, deleting, and modifying all aspects of customer information, generating daily sales and profit reports, and generating customer billing statements and receivable notices. The system will change the user's environment because it will waste less paper, add organization, and speed data retrieval time. As of this point in the development process the users feel the system will have a positive impact on their organization. More feedback will be acquired throughout development and as a prototype is developed and tested.

Operational feasibility reveals how the solution will fulfill the user's current requirements for the job function, how the solution will positively change the user's work environment, and how users feel about the solution.
Economical Feasibility

The system is economical feasible because as mentioned before no additional hardware is needed. The software Caging will be installed to provide the like environment. All of these software applications are open source and can be obtained at no charge.

Economical feasibility determines if the solution is cost-effective and schedule feasibility assesses if the solution can be designed and implemented within an acceptable time period.

Schedule Feasibility

When evaluating schedule feasibility and considering the amount of work required bringing the project to completion I am confident the solution can be designed and implemented within the allotted time. A Gantt chart is included at the end of this document describing the details of the projected completion time frame.

Risk Feasibility

The risk feasibility measures the probability of a successful implementation using the technology I am confident the project will be completed favorably because I have worked on the development of a team database project using similar technology. Also following diligently to the approach put forth in the petrol projects course offers an enhanced chance of successful completion.

This system's risk feasibility measures the probability of a successful implementation using the technology and approach put forth in the solution.

3-) ANALYSIS

The Requirements Determination:

The requirements made by the users are follows:

- To increase the speed of operations
- To prevent the loss of data
- To prevent the data duplications
- To provide easy and quick data access
- To prevent the chaos caused by the increasing number of customers
• To restrict data access with the means of the system security (password entry)

The Existing System’s Capabilities:

• The petrol station work a manual system. All of the documents are held in hand.

• First of all, customers pays the petrol fee unless she/he is not buying. There is a pay-office official for this process.

• The next process is every petrol station available a pumper pointer. But also fit change the worker write and to collect sells the petrol between the working hours. Also this form to make the mistakes and the account too few or too many probability to high.

• The last process is some firms to buy petrol after they will pay whole at the end of month. The petrol station’s employees to write a notebook these firms payment information. This notebook to be lost or forget to register probability to high.

New System Providences:

• The new system will only be accessed by the authorized users. This will provide more secured and accurant operations. The employees’ individual information will only entered or changed by the registration official. The other users in the system will only be able to see this information.

• All data will be kept in computers, therefore problems of storing customers information will be solved. Also the data for each customers will be kept indivually, members of a family will be separated in the system.

• The employees to write a computer the fit start and finish hours. And the computer to compute between the start and finish hours whole sells petrols. Then the computer to show the result.

• Every customers to buy petrol when the petrol station will give a bill and same time this information to write a customer’s account. Also at the end of month, customer will pay whole payment to show total of results also computer.

• The new system will be reflecting the price changes to customers, detailed stock operations and to be classify according to kind of operations, recording the buying and selling operations and their reports, showing the level of the tone of
petrol and open oil as a graphics, to see the entire current movements of the customer in only one form, to report the entire record movements between the 2 dates, to recording of the petrol prices an easy set up practical study and to detailed usage file which explains the usage of the programme step by step of this system.

REQUIREMENT STRUCTURING

THE PROCESSES:

Password Entry: There are only one type of users in this system users. These users can access the system with own password and usernames. For this, first of all, the new users should be registered to the system with the registration password and employee number given by the manager.

1. Customer Process: We enter for the first time add a new customer specific information and the customer will buy how many litres and pat the money. Delete necessary customer information. The other hand, update the customer information. The last one searching a customer by plateID.

2. Employee Process: We enter for the first time add a new employee information, salary information, beginning date of the job and every days start and finish the job time. Delete necessary employee information. The other hand, update the employee information. The last one searching a employee by a name and surname, searching by employeeID, searching by employee salary.

3. Supplier Process: We enter for the first time add a new supplier information, salary information. Delete necessary supplier information. The other hand, update the supplier information. The last one searching a supplier by a company name and searching by a supplierID.
4. **Buying Process:** We enter for the first time add to buying a new petrol type in a depot. Delete necessary buying information. The other hand, update to buying information. The last one searching buying a by supplierID, searching buying by a payment type, searching by a buying date and searching by buying petrol type.

5. **Selling Process:** We enter for the first time add to selling a petrol type in a pumper. Delete necessary selling information. The other hand, update to selling information. The last one searching selling a by pumper no, searching by a plateID, searching selling date and searching by a selling petrol type.

6. **Stock Process:** This process controlling the inventory. We enter for the first time add to buying a new petrol type in a depot and delete to selling a petrol type in a pumper. Update stock information. Searching stock by a petrol type.

7. **Reports:** This process is reporting all of the others processes information.

8. **Application:** This process three parts of system applications. Office applications are such as word, excel and power point. Windows applications are such as notepad, wordpad, calculate and internet explorer. Games are such as solitaire, pinball and hearts.

9. **Settings:** This process two parts of system settings. Program settings make company database, reload database, company information and set date and time. Hardware settings make mouse, keyboard, printer and volume control.

10. **Exit:** The last process is exit the program.
CUSTOMER

Employee Data

Salary

Customer Data

Customer Order

Payment

Customer Bill

Petrol

EMPLOYEE

PETROL STATION INFORMATION SYSTEM

Purchase Invoice

Petrol

Payment Supply

Supplier Order

MANAGER

Reports(*)

1) Customer Information
2) Stock Information
3) Supplier Information
4) Accounting Information
5) Employee Information
DETAIL (Level-1) DFD For PROCESS1 (CUSTOMER PROCESS)

CUSTOMER

Customer Order

Customer Data

1.1 Update and Delete Customer Information

1.2 Accept and Reject Order

Customer Record

Customer Knowledge

CUSTOMER FILE

Customer Demand
DETAIL (Level-1) DFD For PROCESS 2 (STOCK PROCESS)

2.1 Accepted Customer Demand Information

2.2 Prepare Sold Petrol Information

2.3 Prepare Purchase Petrol Information

SUPPLIER

PETROL

STOCK FILE

CUSTOMER

Petrol List Sold

Petrol Sold

Customer Demand

Sold Petrol Knowledge

Purchase Petrol Knowledge

Purchase Petrol

Purchase Order Petrol List

Stock level controls

Customer Petrol Demand

19
DETAIL (Level-1) DFD For PROCESS 3 (ACCOUNTING PROCESS)
DETAIL (Level-1) DFD For PROCESS 4 (SUPPLIER PROCESS)

SUPPLIER

Supplier Order

4.1 Update and Delete Supplier Information

Supplier Record

SUPPLIER FILE

4.2 Checking the Purchasing Petrol

Supplier Knowledge

Stock Level Control

Purchasing Petrol List Control
DETAIL (Level-1) DFD For PROCESS 6 (EMPLOYEE PROCESS)
# Database Design

## Table Customer:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Data Type</th>
<th>Field Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLATE_ID</td>
<td>CHAR</td>
<td>9</td>
</tr>
<tr>
<td>NAME</td>
<td>CHAR</td>
<td>30</td>
</tr>
<tr>
<td>SURNAME</td>
<td>CHAR</td>
<td>20</td>
</tr>
<tr>
<td>COMPANY</td>
<td>CHAR</td>
<td>50</td>
</tr>
<tr>
<td>ADDRESS</td>
<td>CHAR</td>
<td>50</td>
</tr>
<tr>
<td>GSM</td>
<td>CHAR</td>
<td>15</td>
</tr>
<tr>
<td>EMAIL</td>
<td>CHAR</td>
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## Table Employee:

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<th>Data Type</th>
<th>Field Size</th>
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</thead>
<tbody>
<tr>
<td>EMPLOYEE_ID</td>
<td>AUTONUMBER</td>
<td></td>
</tr>
<tr>
<td>NAME</td>
<td>CHAR</td>
<td>30</td>
</tr>
<tr>
<td>SURNAME</td>
<td>CHAR</td>
<td>20</td>
</tr>
<tr>
<td>ADDRESS</td>
<td>CHAR</td>
<td>50</td>
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<tr>
<td>GSM</td>
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<td>15</td>
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<tr>
<td>EMAIL</td>
<td>CHAR</td>
<td>30</td>
</tr>
<tr>
<td>POSITION</td>
<td>CHAR</td>
<td>15</td>
</tr>
<tr>
<td>HIREDATE</td>
<td>DATE/TIME</td>
<td></td>
</tr>
<tr>
<td>EXPLAIN</td>
<td>CHAR</td>
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**Table Supplier:**

<table>
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<th>Field Name</th>
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<th>Field Size</th>
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</thead>
<tbody>
<tr>
<td>SUPPLIER_ID</td>
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<td></td>
</tr>
<tr>
<td>COMPANY</td>
<td>CHAR</td>
<td>30</td>
</tr>
<tr>
<td>ADDRESS</td>
<td>CHAR</td>
<td>50</td>
</tr>
<tr>
<td>PHONE</td>
<td>CHAR</td>
<td>15</td>
</tr>
<tr>
<td>EMAIL</td>
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</tbody>
</table>

**Table Buy:**

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<th>Field Size</th>
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</thead>
<tbody>
<tr>
<td>BUY_ID</td>
<td>AUTONUMBER</td>
<td></td>
</tr>
<tr>
<td>SUPPLIER_ID</td>
<td>NUMBER</td>
<td></td>
</tr>
<tr>
<td>PETROLTYPE</td>
<td>CHAR</td>
<td>15</td>
</tr>
<tr>
<td>TOTAL</td>
<td>CURRENCY</td>
<td></td>
</tr>
<tr>
<td>LITER</td>
<td>NUMBER</td>
<td>6</td>
</tr>
<tr>
<td>PAYMENTTYPE</td>
<td>CHAR</td>
<td>15</td>
</tr>
<tr>
<td>KDV</td>
<td>NUMBER</td>
<td>10</td>
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<tr>
<td>DATE</td>
<td>DATE/TIME</td>
<td></td>
</tr>
<tr>
<td>TIME</td>
<td>DATE/TIME</td>
<td></td>
</tr>
</tbody>
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**Table Sales:**

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</thead>
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<td></td>
</tr>
<tr>
<td>PLATEID</td>
<td>CHAR</td>
<td>9</td>
</tr>
<tr>
<td>EMPLOYEEID</td>
<td>NUMBER</td>
<td></td>
</tr>
<tr>
<td>PUMPERNO</td>
<td>NUMBER</td>
<td></td>
</tr>
<tr>
<td>PETROLTYPE</td>
<td>CHAR</td>
<td>15</td>
</tr>
<tr>
<td>TOTAL</td>
<td>CURRENCY</td>
<td></td>
</tr>
<tr>
<td>LITER</td>
<td>NUMBER</td>
<td>6</td>
</tr>
<tr>
<td>PAYMENTTYPE</td>
<td>CHAR</td>
<td>15</td>
</tr>
<tr>
<td>KDV</td>
<td>NUMBER</td>
<td>10</td>
</tr>
<tr>
<td>DATE</td>
<td>DATE/TIME</td>
<td></td>
</tr>
<tr>
<td>TIME</td>
<td>DATE/TIME</td>
<td></td>
</tr>
</tbody>
</table>

**Table Stock:**

<table>
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<th>Field Name</th>
<th>Data Type</th>
<th>Field Size</th>
</tr>
</thead>
<tbody>
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<td>PETROLTYPE</td>
<td>CHAR</td>
<td>15</td>
</tr>
<tr>
<td>LITER</td>
<td>NUMBER</td>
<td></td>
</tr>
<tr>
<td>UNITPRICE</td>
<td>CURRENCY</td>
<td></td>
</tr>
<tr>
<td>CAPACITY</td>
<td>NUMBER</td>
<td></td>
</tr>
</tbody>
</table>
CUSTOMER PROCESS

1. Add a new customer
2. Delete customer
3. Update customer information
4. Search customer

Select your choice

Selection=1

1.1

Selection=2

1.2

Selection=3

1.3

Selection=4

1.4

1
SEARCHING CUSTOMER INFORMATION BY PlateID

1.4.1

Enter a PlateID

Search

No customer in this PlateID found

No Found

Y

N

Show list of customer information

1

Show list of customer information
EMPLOYEE INFORMATION

Submenu
1-Add a new employee
2-Delete employee
3-Update employee information
4-Search employee

Select your choice

Selection=1
Y → 2.1
N

Selection=2
Y → 2.2
N

Selection=3
Y → 2.3
N

Selection=4
Y → 2.4
N

2
SEARCHING EMPLOYEE INFORMATION

2.4

Submenu
1-Search by employee name and surname
2-Search by employee id
3-Search by salary

Select your choice

- Selection=1 (Y) → 2.4.1
- Selection=1 (N)
  - Selection=2 (Y) → 2.4.2
  - Selection=2 (N)
    - Selection=3 (Y) → 2.4.3
    - Selection=3 (N)
      - 2
SEARCHING EMPLOYEE INFORMATION BY Name and Surname

2.4.1

Enter Employee Name and Surname

Search

No Found

Y

No employee in this name and surname

N

Show list of employee information

2
SEARCHING EMPLOYEE INFORMATION BY EmployeeID

2.4.2

Enter EmployeeID

Search

No Found

Y

No employee in this employeeid

N

Show list of employee information

2
SUPPLIER PROCESS

Submenu
1-Add a new supplier
2-Delete supplier
3-Update supplier information
4-Search supplier

Select your choice

Selection=1
Y -> 3.1
N

Selection=2
Y -> 3.2
N

Selection=3
Y -> 3.3
N

Selection=4
Y -> 3.4
N

3
SEARCHING SUPPLIER INFORMATION

3.4

Submenu
1-Search by company name
2-Search by supplierid

Select your choice

Selection=1

3.4.1

Y

Selection=2

3.4.2

Y

N

N

3
SEARCHING SUPPLIER INFORMATION BY Company Name

3.4.1

Enter Company Name

Search

No Found

Y

No supplier in this company name

N

Show list of supplier information

3
SEARCHING SUPPLIER INFORMATION BY SupplierID

3.4.2

Enter SupplierID

Search

No Found

Y

No supplier in this supplierid

N

Show list of supplier information

3
BUYING PROCESS

1-Add a new buying
2-Delete buying
3-Update buying information
4-Search buying
SEARCH BUYING INFORMATION

Submenu
1- Search by SupplierID
2- Search by Payment Type
3- Search by Buying Date
4- Search by Petrol Type

Select your choice

Selection=1

Y → 4.4.1
N
Selection=2

Y → 4.4.2
N
Selection=3

Y → 4.4.3
N
Selection=4

Y → 4.4.4
N

4

40
SEARCHING BUYING INFORMATION BY SupplierID

4.4.1

Enter SupplierID

Search

No Found

Y

No buying in this supplierid

N

Show list of buying information

4
SEARCHING BUYING INFORMATION BY Buying Payment Type

4.4.2

Enter Payment Type

Search

No Found

Y

No buying in this payment type

N

Show list of buying information

4
SEARCHING BUYING INFORMATION BY Buying Date

4.4.3

Enter Buying Date

Search

No Found

Y

No buying in this Buying Date

N

Show list of buying information

4
SEARCHING BUYING INFORMATION BY Buy Petrol Type

4.4.4

Enter Buy Petrol Type

Search

No Found

Y

No buying in this Buy Petrol Type

N

Show list of buying information

4
SELLING PROCESS

1. Add a new selling
2. Delete selling
3. Update selling information
4. Search selling

Select your choice

Selection=1

5.1

Selection=2

5.2

Selection=3

5.3

Selection=4

5.4

5
SEARCH SELLING INFORMATION

5.4

Submenu
1- Search by Pumper No
2- Search by PlateID
3- Search by EmployeeID
4- Search by Selling Date
5- Searching by Selling Petrol Type

Select your choice

Selection=1

Y

5.4.1

N

Selection=2

Y

5.4.2

N

Selection=3

N

Selection=4

Y

5.4.4

N

Selection=5

Y

5.4.5

N

5
SEARCHING SELLING INFORMATION BY Pumper No

5.4.1

Enter Pumper No

Search

No Found

No selling in this pumper No

Y

N

Show list of selling information

5
SEARCHING SELLING INFORMATION BY PlateID

5.4.2

Enter PlateID

Search

No Found

Y

No selling in this PlateID

N

Show list of selling information

5
SEARCHING SELLING INFORMATION BY EmployeeID

4.4.3

Enter EmployeeID

Search

No Found

Y

No selling in this EmployeeID

N

Show list of selling information

5
SEARCHING SELLING INFORMATION BY Selling Date

5.4.4

Enter Selling Date

Search

No Found

Y

No selling in this Selling Date

N

Show list of selling information

5
5.4.5

Enter Selling Petrol Type

Search

No Found

Y

No selling in this Selling Petrol Type

N

Show list of selling information

5
STOCK PROCESS

1-Add a new buying petrol
2-Delete selling petrol
3-Update stock information
4-Search stock

Submenu

Select your choice

Selection=1

Y → 6.1
N

Selection=2

Y → 6.2
N

Selection=3

Y → 6.3
N

Selection=4

Y → 6.4
N

6

52
SEARCHING STOCK INFORMATION BY Petrol Type

6.4.1

Enter Petrol Type

Search

No Found

Y

No stock in this Petrol Type

N

Show list of petrol stock information

6
APPLICATION PROCESS

Submenu
1-Office Application
2- Windows Application
3-Games

Select your choice

Selection=1
Y → 8.1
N

Selection=2
Y → 8.2
N

Selection=3
Y → 8.3
N

8
APPLICATION WINDOWS APPLICATION INFORMATION

8.2

Submenu
1-Notepad
2-Wordpad
3-Calculator
4-Internet Explorer

Select your choice

Selection=1
Y 8.2.1
N

Selection=2
Y 8.2.2
N

Selection=3
Y 8.2.3
N

Selection=4
Y 8.2.4
N

8
APPLICATION GAMES INFORMATION

8.3

Submenu
1-Solitaire
2-Hearts
3-Chess
4-Minesweeper
5-Spider
6-FreeCell

Select your choice

Selection=1
Y → 8.3.1
N → Selection=2

Selection=2
Y → 8.3.2
N → Selection=3

Selection=3
N → Selection=4

Selection=4
Y → 8.3.4
N → Selection=5

Selection=5
Y → 8.3.5
N → Selection=6

Selection=6
Y → 8.3.6
N → 8
57
SETTING PROCESS

- Program Setting
- Hardware Setting

Select your choice

- Selection=1
  - Y: 9.1
  - N: Return to 9

- Selection=2
  - Y: 9.2
  - N: Return to 9
SETTING PROGRAM SETTING INFORMATION

9.1

Submenu
1-Backup Database
2-Reload Database
3-Company Information
4-Set Date&Time

Select your choice

Selection=1

Y → 9.1.1

N

Selection=2

Y → 9.1.2

N

Selection=3

Y → 9.1.3

N

Selection=4

Y → 9.1.4

N

9
SETTING HARDWARE SETTING INFORMATION

9.2

Submenu
1-Mouse
2-Keyboard
3-Printer
4-Volume Control

Select your choice

Selection=1
Y → 9.2.1
N

Selection=2
Y → 9.2.2
N

Selection=3
Y → 9.2.3
N

Selection=4
Y → 9.2.4
N

9

60
USER GUIDELINES

If the user wants to change the folder or destination that the program will be installed by clicking on 'Change' and after choosing the destination, can click on 'Next' option.

The user can choose the type of set up above the figure. After choosing the type, user can click on 'Next' option.

The above figure, the user will directly click on 'Next' option.

In the next Windows opened, as shown this figure, the user will not have to do anything, but just wait for the installation to be completed and this process will take a few minutes according to the capacity of the computer.

In this figure the user will click on the 'Finish' button to end the installation of the program. The Petrol Station Automation System has been successfully completed in this way. After the window in this figure is closed, the user open the program from the destination that user installed the program.

For example, I installed the program to folder called 'Petrol Station Automation System' under the 'Programs' option in start menu in this figure. If you click on Petrol Station Automation System executable form inside the folder 'Petrol Station Automation System', the program will start to run. The first window opened in the program is the main page for all users as shown in this figure.

Password Entry

This part of our program is user login with user password. If the users registered with their username and passwording system, they can login our system as shown in this figure.
In password entry form, username and password of user controlled with their registered information in database. If entering the username and password don't correct or correspond with database, application gives an warning message to user to correct information as shown in this figure.
Password form also controlled blanks fields by user. If user does not enter any information, again program will give a warning message as shown in this figure.

If the user correct username and password information and then main menu of program opens as shown in this figure.

Main Menu

After entering correct password, in the program; main menu opens. Main menu provides to control all functions of program. Main menu is a guide for user that we will do functions. We can arrive to each menu from the main menu. For example; customer, stock, employee and also their buying and selling records. As you see in this figure, main menu contains the controlling of every functions buttons. Also we can arrive to every functions panel by function keys of keyboard (F1,F2,F3,...) that show for each panel on the function buttons.
Customer Menu

Our customer informations are stored in our customer panel. Customer panel provides to reach recording details of our every customer. Customer panel has shown as in this figure. As you can see this figure, at the bottom of the panel, navigation buttons control the related operations that are add, delete, update, search, save and moving between records.

Stock Menu
Stock panel contains all details of our petrols in the stock. While program users buy any petrol for own petrol station, user should enter some of buying petrol to this part of program. Recording buying petrols are show the petrol depot and recording buying petrols lists in grid list with their details. Also they are controlled by navigation buttons. Stock panel shown as in this figure.

**Buying Menu**

From buying panel, we reach buying informations related with buying processes. If program user wants to buy petrol, during this buying processes, user should enter buying informations to system with this panel. Recording buying petrols are show the petrol depot increasing and recording buying petrols lists in grid list with their details. Buying panel has shown as in this figure.
Selling Menu

With selling panel, user can see records selling process. When the user sold any petrol from stock, user should enter this information as a record to the database with using selling panel. And selling the petrels are show the petrol depot decreasing. Selling panel has shown as in this figure.

Supplier Menu
Supplier informations are stored in our supplier panel. Supplier panel provides to reach details of our every supplier. Supplier panel has shown as in this figure.

**Employee Menu**

![Employee Menu Image]

If the user has employee or personnel, I mean user was operating these employees, user needs hold the informations of these employees in the database. Therefore our program support this need. Employee panel answers to this need as shown in this figure.

**Reports**

After this all processes, program user can see all results graphically as the diagrams. Program has supported visualization results according to different processes. User can look and control all of this process as visual graph. After pressing reports section or button from the report main menu panel will open.
Applications

Our program supports to reach any applications which belong to Windows operating system. User can use necessary applications with medium our program. During the process in this program, user can not want to quit Windows to run any applications. This panel as shown in this figure.

Settings
Like most Professional programs, our program contains a settings menu. User can change some settings according to opinions of user. Setting menu has several properties related with program. User can control many settings related with program from this panel. This panel as shown in this figure.

**Exit**

When the users wants to quit program, user uses exit button. After the user pressed exit button on the main form, program wants a confirmation which is yes or no. If user answers as yes, program is closed but the users answers no, program will continue to run.
REFERENCES