

Automation Petrol Bunk Management System by RSA Algorithm

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Abstract - In Petrol Pump management system, the main objective of this software planning is to provide a framework that enables the manager of petrol pump to make reasonable estimate made within a no time frame decision for sales, employee, and should be updated towards system. This system maintains their sales detail, employee detail in files and folders, as keeping daily register is very time consuming and tedious task. For searching of a single record, whole register is to be searched which is very time-consuming task.

Key Words: Petrol station, Management System, Information System, Information Technology, Petroleum System, Automated System, etc.

1. INTRODUCTION

The current petrol pump management system is manual system which is very slow, not that much accurate, time-consuming and in a disorganized manner. An essential part of the system analysis, is for developer to understand the current situation of the system. And developer goes through details of the system for the understanding physical flow of the information of the current system. Then developer collects various information from the system then identifies difficulties experienced by user and focus to solve it.

We provide database record on how we can update the particular information about diesel, petrol and employees report. Also, we will keep track of particular amount of pay of petrol, diesel on each particular day.

2. PROPOSED SYSTEM

- As compared to the present system, proposed system is computerized and has been developed using advanced languages.
- It provides quick access to any data.
- As the system is advanced in computerized user have to enter data only one time as it gets linked files after once entered.
- This system has time saving process and reduces overload.
- As a system-maintained reports and records, we can manipulate data as we want at any time.
- Secondly seen as only today's rate is display online so we are going to add yesterday's rate and today's opening rate which gives us how much total sell today.

- Total how much cash is collected which includes online payment as well as cash payment in the proposed system.

3. IMPLEMENTATION PROCESS AND SYSTEM ARCHITECTURE

As shown in figure 1 is System Architecture of Petrol Pump Management System by using RSA Algorithm. In which it consists of different component like daily petrol diesel transaction, Expense Management, Customer Management, Customer Transaction, Reports, Login, Registration, and so on. In which,

Registration:

- At the time of registration, there is a username and password block is provided username and password block are provided.
- Customer will enter the username and password as per the choice and will get registered in the system.
- This username and password will get stored in the database in the incepted format.

Login:

- After registration the user will directly login to the system by using the username and password entered at the time of registration.
- Firstly, password will be in the human readable format.
- By using the RSA algorithm encryption add decryption operations will be performed on the password.
- Then it will get checked and compared database and entered.
- After matching father process will continuous otherwise it will give the "Incorrect Password" message.

Add New Customer:

- If owner wants to give fuel to the particular customer for free and if customer will pay for this later then that customers name will be added in that section.
- In this there is a drop-down list which will keep all the records of that particular customer and daily in and out customer.

Transaction:

- In this all the money related transaction will be done, i.e., credit and debit.
- And also, the record of that transaction will get stored in database and also the drop-down list will get visible that how many customers did the transaction and who not.

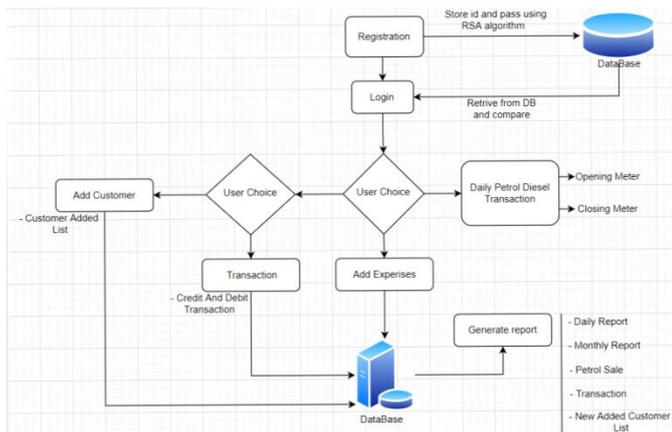


Figure 1: System Architecture of Petrol Pump Management System.

General Report: So, we have created report for that transaction which will keep all record. In that report, customer will get the information as per the input he/she select like

- Daily Report
- Monthly Report
- Sale
- Transaction
- Bill
- Stock of fuels

Daily Petrol and Diesel Transaction:

- User will enter the closing value of the meter so that application will fetch the record from the database as yesterday's closing rate will get consider as today's opening rate.
- In short, Meter Reading will be done.

Add Expenses: Expenses Management in which all these records will be recorded like how many fuels is in the tanks.

- How many fuels go sale?
- How many fuels remains in the tank?
- What is the final cost after all the meter reading?
- Any extra activities done at the petrol pump like water bottle get sold any other snacks and all those things.

4. CONCLUSIONS

In today's IT world it's important to have knowledge of new technology for secure system and for distribution of fuels and to stay records of a similar fuel with approved user. This project in all probability will be enforced for the employment of alternative task apart from gasoline costs on massive scale to attain varied Goals of business.

We designed user interface, computer program and security problems that is expounded to the system. Finally, the system is implemented and checked consistent with test cases.

5. FUTURE SCOPE

- Now a days everything is flexible i.e., therefore as system. Sweetening will be done to take care of all the record of all the fuels, stocks, sales, tankers, meter reading.
- Also, we've got left system open if the any system demand within the system the iit will be enforced by user.
- We can give offer a lot of advanced software package together with a lot of facilities.
- The system is hosted the platform as on-line serve so in order that it will be accessible worldwide.
- It will have integrated multiple load balancer to distribute the load of the system.
- To overcome different database related queries, Master-Slave Database system is created.
- It also can have backup mechanism for taking backup of codebase and dated on regular basis on totally different server.
- It also can have printer in system for future use.

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This analysis work was with success finished the assistance of those reference paper. And that we had coated totally different unsolved drawback during paper within the section of projected system, that paper within the section of projected system, that has been there in previous reference paper.

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