INFORTEC INTERNATIONAL

Rajaguru Stores Super Market POS System

**Project Proposal
Information Technology Final Project**

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Project ID:

Submitted to:

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(Supervisor's signature)

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Abstract

This project is for a POS system. We are making this project for the Rajaguru Stores [pvt] Ltd. It is a grocery shop which is focusing to supply customer requirements using an online system and a POS system.

So we met the Rajaguru Stores owner Mr.Sudath Rajaguru and suggested him to purchase our POS System. So we are working together as a team to complete our task and we are hoping to fulfill the client requirements with the support of our suggestions. We are mainly targeting to satisfy our client and make the software which our client actually expects.

Contents

1. Introduction and Description of the Project

Our goal is to develop a POS System for Rajaguru Stores (Pvt) Ltd. According to our observation reports, we have found several significant functions.

This system is specifically going to be developed as a POS System for the above mentioned process. In this process, the Store items are stored in the stock control system. Then the new items are added and the current items are reduced from the system when transactions are done. Once the transaction system and the stock control system are created, then the billing system is created. We are also making an online system for this system.

1.1 Problem Specification

Our main purpose is to satisfy the client requirements such as efficiency, speed and accuracy of the day to day transactions within the system. These are the client problems that we targeted to resolve.

- To manage the billing and store items since the count of the items increase.
- To find the quantity of sold items and the profit of them.
- To determine the change in the quantity of the store item.
- To summarize the Expenditure, Profit and Loss.
- More time to make the project.

1.2 Solution Outline

We have given you a brief idea in above problem specification, and in this part we suppose to explain how we are going to achieve our final target during the scheduled period maintaining all the goals and objectives mentioned in the project.

1.2.1 Accuracy and Efficiency

Every company expects highly reliability and efficiency of their automated systems than manual processing systems. So we suppose to use much validating procedures and light weight coding procedures to maintain the accuracy and efficiency of the system.

1.2.2 Employee privileges

Every employee has a certain task in this system. As an example stock handling manager
Have to enter data of every item which exist in the stock and he will be informed by the system when lack of a certain item. Then he can replace the required number of items.

In the billing section employee only have to do is select item ID and quantity. Then system will print a bill including all the transaction details. If there is any offer to the item system will reduce it from total and will mention it on the bill as well.

1.2.3 Customer privileges

Every customer will be issued a bill which included all the transaction details in normal procedure. Otherwise customer also can use our online system and deliver all the items to the home. Customer has to create an account and then a customer ID will be assigned to the customer. Then the customer can log in to our system and can select available items in the store and also can pay using any online money transferring service. Customer also will receive an online receipt which included all the transaction details.

1.3 Key benefits

Main benefits of our software are,

- Information security
- Data storage system
- Time is saved, increase in transaction Speed and make the work easy.
- Profit increase

Can make count of the amount of work done.

2.   Objectives

- Our goal is to satisfy the client's requirements to the maximum.
- Our intension is to give efficient and productive, client friendly system.
- To limit the errors within the manual system.
- To give reliable information about data and maximum security for the database where data within the system cannot be access by any third party.
- To aware the client about the items that is out of stock. Also to warn about the expired items.
- To do many transactions within a short time.
- To indicate the profit, loss, expenditure, special offer, discounts, within the store.

2.1 Billing System

Billing part is a major part of a grocery and it interacts with all daily transactions. In this system we suppose to provide chance to get a printed bill included of all necessary facts according to client's requirements such as bought items, quantity of each, price of each and total price, Discounts. A printer connects to the machine and people who handle the system can enter all above values manually and can print the bill from a single command

2.2 Stock Handling System

Stock Handling is also an important part in the system. All items will be recorded when they accepting from the stock manager. For every transaction System's database will be update and if some item decreases than minimum number of the certain item the system informs that from a message. Our client don't want to exist any expired items in the stock, so that we created a notification prompt for stock keeper with expired item's name and quantity remaining when an item expired.

2.3 Suppliers Details

There is an aspect of the system to store information about the suppliers, what are the equipment they supply, quantity and expire date. And also client requires a section to manipulate information of employees like salary and working hours

2.4 Online Order System

We are supposed to create an online system which customers can buy goods through an online system. For this the customer has to register in our online system and order the items and give the delivery time where customer wants the order to be delivered. Delivery charge may apply according to the distance.

3.   Procedures

3.1   Flow of the Project

Through a contact, the project team was able to make an appointment to discuss with the Director of Rajaguru Stores (Pvt) Ltd. There he explained that they have a problem with manipulating information in their large stock handling system as they did not have any automated system which is specific to the company.

So our team got their requirements and planned to do our first project well. We are mainly targeting to satisfy our client and make what actually client requires.

3.1.1   Feasibility Study

After gathering information from the client, our group members had some discussion sessions to analyze the information we have gathered and discuss about the feasibility.

•   Schedule Feasibility

•   Economic Feasibility

•   Technical Feasibility

3.1.2   Requirement Analysis

We collected the requirements from the workers, client and customers. Then we analyzed the requirements step by step. Last we sent the requirement analysis report to the system analysis team.

3.1.3 System Analysis

As the company does not have any system it was totally a brand new task to decide a suitable system as the requirement analysis has done by studying the manual process. The basic system has been analyzed and there can be differences according to the client requests in the future.

Our next task will be developing and designing the prototype, writing the SRS document and then creating the DFD and finally preparing the ER diagram.

3.1.4 System Design

The design part is going to be divided into several main categories.

- **Software and web interface designing**

Interface designing will be one of the most important parts in the designing part because the user is interacting with the interface which is provided, so the interface must be user friendly and must fulfill all the needs of the customers.

- **Database Designing**

Database should be well designed as there is lot of information which the customer is involved with. So the database is going to be implemented using Logical database design and Scheme refinement by applying Normalization.

3.1.5 Implementation and Unit Testing

We'll be allocating functions among group members to implement those functions. After the basic functions are implemented, basically a structure and design is to be generated to get feedback from the users. After the feedback is taken, the necessary changes are to be done. Next step is to combine the functions together that are implemented by each individual group member and implement the full function for further unit testing.

After implementing the fully functional system, we are planning to do white box testing, black box testing and also the most important part; stress testing is going to be concluded.

Finally our group members suggested implementing the System for selected employees for further testing.

3.2   Project Plan

Tasks   **Time**

1. Finding a client and a company for the project ------------------ 20th to 25th July

2. Submitting the group confirmation letter ------------------------ 25th July

3. Analyzing the requirements --------------------------------------- 1st to 25th August

4. Submitting the concept paper ------------------------------------- 30th of August

5. Preparing the budget-- 1st to 3rd September

6. Submitting the project proposal---------------------------------- 15th September

7. Creating the SRS document--- 15th to 30th September

8. Submitting the SRS document ------------------------------------- 7th October

9. Creating prototype--- 1st to 15th October

10. Submitting the prototype with presentation -------------------- 15th October

11. Implementing the corrected system and coding---------------- 15th to 25th October

12. Submitting the project with final document -------------------- 25th October

13. Final presentations -- after 25th October

No of Task	Start Date	End Date	July				August				September				October			
Weeks			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	20/07/2014	25/072014			▓	▓												
2	25/07/2014	25/07/2014				▓												
3	01/08/2014	25/08/2014					▓	▓	▓									
4	30/08/2014	30/08/2014								▓								
5	01/08/2014	03/08/2014									▓							
6	15/09/2014	15/09/2014										▓						
7	15/09/2014	30/09/2014										▓	▓	▓				
8	07/10/2014	07/10/2014													▓			
9	01/10/2014	15/10/2014													▓	▓		
10	15/10/2014	15/10/2014														▓		
11	15/10/2014	20/10/2014														▓	▓	
12	25/10/2014	25/10/2014															▓	
13	25/10/2014	25/10/2014															▓	▓

4.   Personnel and Facilities

Student number	Members and roles	Function
13NU1222	Coding, Testing and Error Handling, Documentation, Create Database, Budget Handling, Online System Handling	Online Ordering System
13NU1221	Coding, Testing and Error Handling, Documentation, Create Database	Stock Management and Handling
13NU1220	Coding, Testing and Error Handling, Designing Interfaces, Documentation, Client Handling and Time Management	Notification System
13NU1218	Coding, Testing and Error Handling, Documentation, Customer Details, Designing Interfaces, Create Reports, System analyzing	Online Customer Registration and Login System
13NU1223	Coding, Testing and Error Handling, Documentation, Time Management, Create Backup and Restores, Project Management	Billing System
13NU1225	Coding, Testing and Error Handling, Documentation, Time Management, Outsources Handling	Supplier Registration System
13NU1106	Coding, Testing and Error Handling, Documentation, Time Management, Client Handling, HR Management	GRN System

5.   Hardware and Software Requirements

5.1   Hardware Requirements

To implement this grocerry System does not need a very high end machine. However broadband internet connection is suggested to gain a good performance.

5.2   Basic System Requirements

1) 2.0 GHz processor with 2MB L2 cache Memory 512MB DDR II RAM Memory
2) 100 GB HDD (if necessary must expand as system request) (Other features in a pc won't be a much issue)
3) Web server
4) System needs a web server which enables PHP, SQL, DNS server, Mail server, Security and an enough space to implement this recrutment system.

5.3   Software Requirements

- To run this Automation System success fully in a operating system it need(Linux, Windows, Mac OS) and any kind of Browsers
- MySql version 5.6.20
- Xampp 1.8.3-3-VC11- sever

6.   Budget

The main expenses in this project are

•   Travelling Charges

•   Communication charges

•   Document Preparing

•   For Stationeries

And approximately these will take around Rs.4000.00 to cover up our expenses.

Description	Withdraw (Rs.)
Travelling Charges	500.00
Stationeries	1000.00
Communication Charges	500.00
Document Preparing	1500.00
Total	**3500.00**

7.   References

- o PHP manual

    - www.php.net/docs.php

- o PHP tutorials from following site.

    - www.w3schools.net

    - www.php.net

- o YOU TUBE

    - www.youtube/newboston

- o Linda.com

- o Library books & E-books