

# RFID based Salon System

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## Abstract –

Salon management system which is helpful for the Business Operators, where shopkeeper keeps the record of customers and employees. Mismanaged records of services provided to the customers means disappointed customers, too much cash tied up in slower sale. This system is eliminate paper work, human faults and speed up process. This Saloon management system will have the ability to digitally manage services which provided to the customers. This system also manages that which employee provide service to which customer, also it manages all the history of the customer and helps to manage all transactions. Salon management system is window-based application developed for windows operating system which focuses mainly on customer satisfaction. The software is made up of two parts : The frontend is developed using C#sharp, Windows form application, Reports : RDLC and for Backend MSSQL.

**Keywords** – Salon Management System, Services provided, transactions, etc

## INTRODUCTION

‘RFID based Salon System’ is our project. It is a sponsored project by “MayuriTechnologies”. Salon management system is a windows based application which is used as a authentication application. This application features are different for each human being so that the customer can be identified uniquely.

In this application the customer will be registered firstly. In the process of registration the details of the customer would be collected and saved in the database so that it would be easier and faster for the admin/owner to manage the customer services when the customer visits the salon again. A RFID card with different authentication numbers would be allotted to the newly registered customer for fetching the details from the database fastly whenever the customer visits the salon. As salon management system is a part of businesscommunication both, the owner and the customer should be satisfied with their demands and needs. This application is made by keeping this point of view in mind which is not introduced in the market till up to date.

RFID based Saloon System provides application software to carry out activities regarding customer registration, services provided, login forms, transaction information, reward points, employees information etc... for the saloon which is an automated system instead of making manual entries into books which consumes a great amount of time.

## OBJECTIVE OF SYSTEM

The main objective of developing this system is that the system is not introduced in the market till up to date, for salons to manage the records of customers in a systematic and efficient way.

To provide a software application for salon shop. To bring an attractive, digital shop and makes more interaction between customer and shopkeeper. Which provides feasible options to everyone associated with the application directly and indirectly. Also to track provided services to the customers and bills that has been generated previously. To keep data in a properly organized way and provide greater efficiency to the users of this application. To reduce clerical work as most of the things

will be accomplished automatically with the help of application software. To minimize the time for processing of various tasks there by reducing time consumption. As the application stores the sensitive information, we have provided the security features for the access authorization processes. This application helps the prevention of paper wastage as most of the things are to be stored in the system thereby it eco-friendly.

### **LITERATURE SURVEY:**

Being a salon client you have to remember a lot of things finding salons over a lot of salons, take care of business hours, and make a call to book an appointment so tracking all these things somewhere on the web is a headache. This is the experience of many people who go to the salon; even we live in the twenty-first century. So there is a need of “one-stop-shop”.

An online platform that connects clients to salons, and put all the information that user need in one convenient place.

One of the major issues in this business is that the waiting time of the services which is quite long. After calculating a minimum time limit that a customer spent in a saloon is approx. 30 min. with basic services like hair wash, haircutting, trimming. If the service increases, the waiting time of the next customer increases. The online check-in system in the saloon saves time . In 21 century many salons are still using pencil and paper and old ways to schedule appointments and manage customers. This

old system does not help you in sharing and syncing information, and the chance of human error. This new platform promises to end dependence on paper-pencil systems and put control of salons in easy to use interface. This system manages the services of salons and also tracks the satisfaction of customers.

### **SYSTEM ARCHITECTURE**

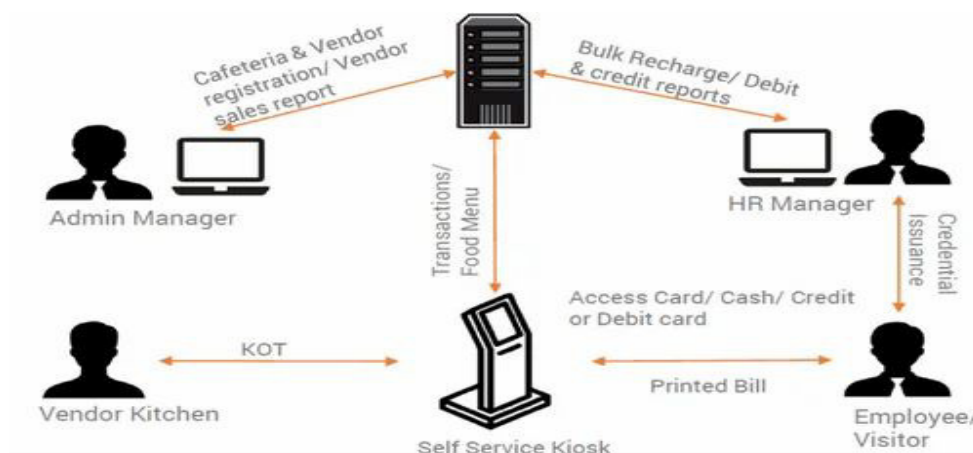


Fig.System Architecture Diagram

### **ADVANTAGES**

#### **Advantages for the customer**

When the customer registers successfully, the customer would be given a particular points on the amount of the services he takes from the salon. Each point will consist of some price amount which he can redeem when he visits the salon every next time and depending on the points he would get the best deals or discount on the services of the salon everytime when he redeems the points from he’s account which is created in the application.

#### **Advantages for the owner**

Whenever the customers visits the salon and tries to redeem the points the customer would be able to redeem the points on a condition that would be like he has to keep minimum amount of points in he's account which is created in the application so that the owner would not lose the customer and the customer would also be satisfied as he's needs or demands are fulfilled.

## **SYSTEM REQUIREMENTS**

### **Hardware requirements**

USB reader

RFID Card

RAM – 4GB(minimum)

Operating system – windows (core i3)

### **Software Requirements**

Front-End: C#sharp ,Application windows form

Reports:RDLC

Back-End: MS SQL – used stored procedure

## **ALGORITHMS**

Algorithms are typically used to omit extraneous reads. For example, if you are trying to read the tags of all items sitting on a single shelf, but not those of the items above or below the target shelf, algorithms can help to identify the tags you don't want to read. The reader will then not send the serial numbers of those tags to the backend software. Similarly, if you are reading tags on a pallet loaded onto a forklift truck, you might also pick up the serial numbers of tags on items in a warehouse aisle. Algorithms can be used to determine which reads are extraneous to the current task and instruct the software to ignore them. The only way to test the effectiveness of these algorithms is to test different readers in real-world scenarios and see which one did the best job of delivering the tag reads you wanted, while eliminating those you did not want.

## **CONCLUSION**

As the application is beneficial for both the owner as well as the customer and this type of application is not in the market till today and is very useful for the salons and made for dealing the issues of the customer and provide him the best service from the salon with making a parallel balance of the customer and the salon services and both the users would be satisfied.

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