Cairo University

Faculty of Engineering **CHS - Team 18**

Computer Engineering Department

CMPN202

# **Introduction to Database Systems**

# **Beauty Salon Management System**

# **Implementation Phase**

# **Team Number: 18**

**Team Members:**

Mohamed Hassan Mohamed Abd El-Baky Amin 1190118

Maria Andraws Kamal Elalfy Rofaeel 1200430

Peter Ashraf Moussa Maximus 1200901

Bassant Hisham 1190018

**Contact Info:**

[mohamedhamin1421@gmail.com](mailto:mohamedhamin1421@gmail.com)

[maria.rofaeel02@eng-st.cu.edu.eg](mailto:maria.rofaeel02@eng-st.cu.edu.eg)

[peter.maximus02@eng-st.cu.edu.eg](mailto:peter.maximus02@eng-st.cu.edu.eg)

[Bassentkhafagi@gmail.com](mailto:Bassentkhafagi@gmail.com)

## **Problem Definition:**

As the world is moving towards digitalization. We looked at a system that could be digitalized, and we choose a management system for a beauty salon.

We’re planning to implement a Desktop Application to be used as a management system for a small beauty salon. We are going to resample a real beauty salon system where simply we have customers, Teller, and administrator. The teller and admin will use the application to facilitate their work to store data of the salon orders, inventory, employees, and customers through a well designed simple UI.

In this system there will be two users, first the Admin who represent the salon owner. Teller who represent the one working on the front desk to place orders and answer the customers questions and offer them discounts. A list of the users privileges could be found in the next section.

**Users & Functionalities:**

**Admin:**

1. Login/Logout
2. View history of orders
3. Create new user profile for customer
4. Edit prices of products or services
5. View inventory
6. Edit inventory
7. View employees timeline
8. View/Edit current employees
9. Creating Teller account
10. Setting offers

**Teller:**

1. Login/Logout
2. Place orders
3. Offer discounts
4. View history of orders
5. Create new user profile for customer
6. View workers timeline

## **Entities:**

|  |  |
| --- | --- |
| Name | Description |
| SystemUser | User account for employees who can access the system (Teller, Admin) |
| Worker | Employees working in the salon who can either be Teller, Salon worker, admin |
| Customer | customer can place multiple orders and their records of previous orders are stored |
| Order | An order placed by customer containing the order’s data |
| Services | The services that the salon offer to customers |
| Inventory | Contain all the salon storage |
| Devices | Devices used in the salon to be able to perform services |
| Maintenance | Maintenance sheet of all devices |
| Offers | Offers that could be offered to the customer |
| Schedule | The current working schedule of the salon |
| Logs | Contain the Logs of orders and maintenances |

## **Schema:**

**Customer:**

**Devices:**

****

**Inventory:**

**Logs:**

****

**Maintenance:**

**Offers:**

****

**Order:**



**Schedule:**



**Services:**

****

**ServicesInOrder:**

****

**SystemUser:**

****

**UsedProductsInServices:**

****

**Worker:**

****

**Assumptions:**

▪️ Any worker can perform any service (no specialization)

▪️ One worker will make the whole order

▪️ We only provide services (no selling products)

▪️ Each service uses n products

▪️ Two types of discounts:

1- Admin set offer on a service for specific period

2- Points system by number of orders the user can get choose to take a discount or keep the pointes to get a bigger discount.