

Project Name: BikeDoctor Branch PG-DAC Mar-2023

### Documentation On

"BikeDoctor"
PG-DAC March 2023

**Guided By: Ms. Snehal Somvanshi** 

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#### 1. Introduction:

#### 1.1 Document Purpose:

This document communicates the business requirements and scope for developing BikeDoctor. The scope of this document is to define the functional and non-functional requirements, business rules, and other constraints requirements.

### 1.2 Project Background:

BikeDoctor is an Online Vehicle Servicing Booking portal. The purpose of this portal is to enable customers to book an appointment with the preferred Service Centre. They would also be able to get to know about the service centers located in their area, which they were previously unaware of. In this whole process, the customer won't need to wait in queues at Service Centres. The Service Centres would also have clarity on the vehicles incoming and would be ready for the customers. They would also be able to expand their customer base and reach newer customers as well. The admin would monitor the entire system and have the right to authorize any newly registered Service Centres to maintain authenticity. Admin can also revoke the registrations for any Service Centre or Customer found in malpractices.

#### 1.3 Aim & Objectives:

The main objective of this system is to build a portal that improves user accessibility and flexibility to schedule an appointment for servicing of the motorcycle. This portal provides facilities like viewing the registered servicing centres, booking an appointment with the desired centre for the specific motorcycle, selecting what kind of servicing the customer prefers and then checking the progress of servicing along with the extra charges as applicable. The servicing centres can also see the appointments they got and they can update the extra charges and servicing status.

### 2. Business Requirements Overview:

- BikeDoctor is a portal for checking available Service Centres and booking appointment with the preferred one
- In phase 1, BikeDoctor aims towards the customers from 4 different cities and limited areas.
- There are two users for the portal, namely, Customer and the Service centre.
- The Customers can go through the list of registered service centres and book an appointment with the preferred one.
- The service Centre can view the appointments they have and can update the status of any booking according to the work status.
- The Service centre can also update the extra charges which incur at actual while working on the motorcycle.
- BikeDoctor is maintained by an admin

BikeDoctor provides such functionalities which help customers to find a service centre nearby them and prevent waiting in queues for motorcycle servicing. Also, the service centres get ca chance to expose themselves to a wider customer base.

### 3. Functional Requirements Overview:

BikeDoctor consists of Three modules described as below.

- 1. Customer Module
- 2. Service Centre Module
- 3. Admin Module

#### 3.1 Customer Module

- The customers will be able to register to the portal and set any username and password of their choice.
- They would be able to log in to the portal.
- Once logged in, they would be able to view the list of all the available service centres.
- They can book an appointment with the service centre of their choice for any required date.
- Once booked, they can keep a check on the status of the work being done by the service centre.
- They can get update on extra charges levied by the service centre.

### 3.2 Service centre Module

- Service Centre can register themselves and get approved by the admin.
- Once approved, they can log in to the portal.
- Upon logging in, they can view the list of booking they received.
- They can update the status of the work and can also update any extra charges.

#### 3.3 Admin Module

- Admin can approve the newly registered service centres so that they can receive the bookings.
- Admin can view details of all customers, service centres and bookings.
- Admin can also revoke the registration of any customer or service centres who is found involved in any malpractices.

## 4. Non-Functional Requirement:

- The website should use professional design, look and feel and color scheme.
- Users will have no limitations for accessing the application through Internet.
- Being a public website, the site must follow general usability guidelines for menus, navigation, colors, links and other actions provided on the screens.
- The system should be designed in such a manner that user will be able to complete tasks in minimum number of steps.

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# 5. Use-Case Diagram

### **5.1 Customer:**

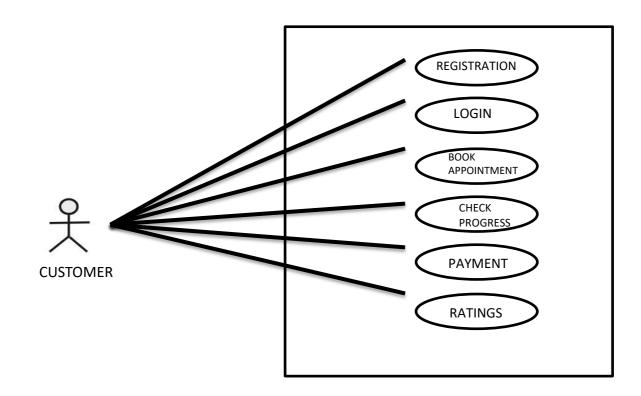


Fig. Use-Case Diagram for Customer

### **5.2 Service Centre:**

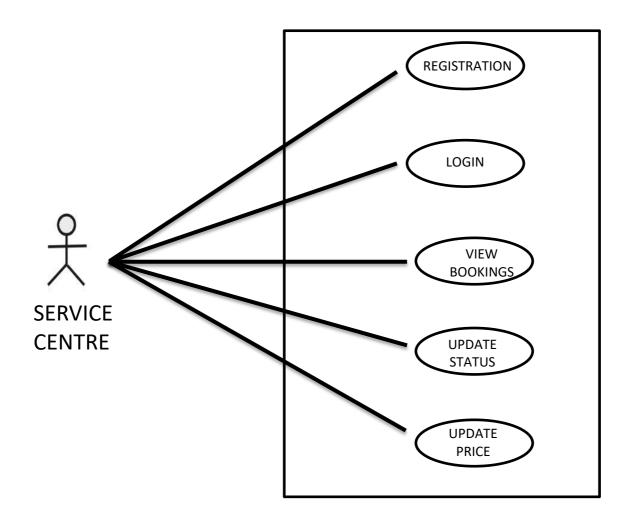


Fig: Use-Case Diagram for Service Centre

### **5.3 Admin:**

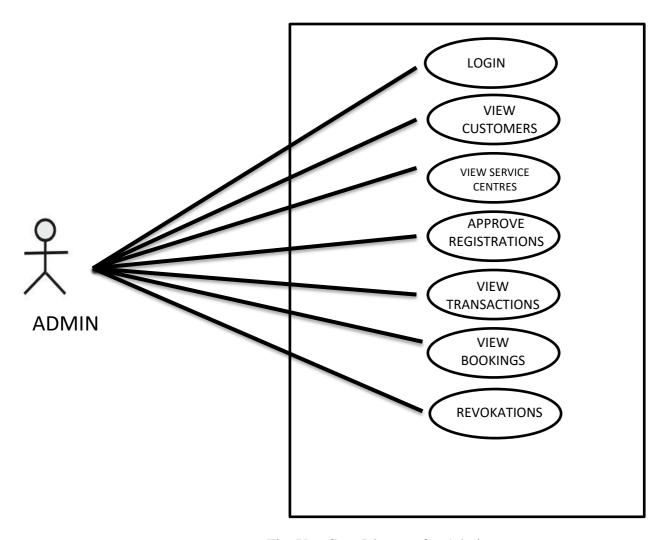


Fig. Use-Case Diagram for Admin

# 6. Database Design:

## 1] login table

| Field                | Туре        | Key | Default | Extra          |
|----------------------|-------------|-----|---------|----------------|
| login_id             | int         | PRI | NULL    | auto_increment |
| username             | varchar(45) |     | NULL    |                |
| password             | varchar(45) |     | NULL    |                |
| Security_question_id | Int         | MUL | NULL    |                |
| Answer               | varchar(45) |     |         |                |
| user_type_id         | int         | MUL | NULL    |                |

## 2] roles table

| Field | Туре        | Key | Default | Extra          |
|-------|-------------|-----|---------|----------------|
| id    | int         | PRI | NULL    | auto_increment |
| role  | varchar(45) |     | NULL    |                |

## 3] customers table

| Field    | Туре        | Key | Default | Extra          |
|----------|-------------|-----|---------|----------------|
| id       | int         | PRI | NULL    | auto_increment |
| fname    | varchar(45) |     | NULL    |                |
| Iname    | varchar(45) |     | NULL    |                |
| area_id  | int         | MUL | NULL    |                |
| Phone    | varchar(45) |     | NULL    |                |
| email    | varchar(45) |     | NULL    |                |
| Login_id | int         | MUL | NULL    |                |

## 4] packages table

| Field   | Туре         | Key | Default | Extra          |
|---------|--------------|-----|---------|----------------|
| id      | int          | PRI | NULL    | auto_increment |
| name    | varchar(45)  |     | NULL    |                |
| Details | Varchar(200) |     | NULL    |                |
| Cost    | Int          |     | NULL    |                |

## 5] service centre table

| Field    | Type        | Key | Default | Extra          |
|----------|-------------|-----|---------|----------------|
| id       | int         | PRI | NULL    | auto_increment |
| Name     | Varchar(45) |     | NULL    |                |
| Area_id  | Int         | MUL | NULL    |                |
| phone    | Vachar(45)  |     | NULL    |                |
| Email    | Varchar(45) |     | NULL    |                |
| Login_id | int         | MUL | NULL    | _              |
| status   | int         |     | NULL    |                |

# 6] bookings table

| Field            | Туре         | Key | Default | Extra          |
|------------------|--------------|-----|---------|----------------|
| id               | int          | PRI | NULL    | auto_increment |
| Customer_id      | varchar(200) | MUL | NULL    |                |
| Booking_date     | Datetime     |     | NULL    |                |
| Appointment_date | datetime     |     | NULL    |                |
| Ser_cen_id       | int          | MUL | NULL    |                |
| Bike_id          | int          | MUL | NULL    |                |
| Bike_reg_no      | varchar(45)  |     | NULL    |                |
| Base_price       | Int          |     | NULL    |                |
| Extra_price      | Int          |     | NULL    |                |
| Estimated_price  | Int          |     | NULL    |                |
| Status           | Int          | MUL | NULL    |                |

# 7] city table

| Field  | Туре        | Key | Default | Extra          |
|--------|-------------|-----|---------|----------------|
| id     | int         | PRI | NULL    | auto_increment |
| cities | Varchar(45) | MUL | NULL    |                |

## 8] transaction table

| Field           | Туре     | Key | Default | Extra          |
|-----------------|----------|-----|---------|----------------|
| id              | int      | PRI | NULL    | auto_increment |
| amount          | int      |     | NULL    |                |
| Customer_id     | Int      | MUL | NULL    |                |
| date            | Datetime |     | NULL    |                |
| Payment_mode_id | int      | MUL | NULL    |                |
| Booking_id      | int      | MUL | NULL    |                |

## 9] area table

| areas   |             |     |         |                |  |  |
|---------|-------------|-----|---------|----------------|--|--|
| Field   | Туре        | Key | Default | Extra          |  |  |
| id      | int         | PRI | NULL    | auto_increment |  |  |
| area    | Varchar(45) |     | NULL    |                |  |  |
| City_id | Int         | MUL | NULL    |                |  |  |

## 10] bike table

| Field   | Туре        | Key | Default | Extra |
|---------|-------------|-----|---------|-------|
| Id      | int         | PRI | NULL    |       |
| Make_id | int         | MUL | NULL    |       |
| model   | varchar(45) |     | NULL    |       |

## 11] makes table

| Field | Туре        | Key | Default | Extra          |
|-------|-------------|-----|---------|----------------|
| id    | int         | PRI | NULL    | auto_increment |
| brand | varchar(45) |     | NULL    |                |

## 12] payment\_modes table

| Field        | Туре        | Key | Default | Extra          |  |
|--------------|-------------|-----|---------|----------------|--|
| id           | int         | PRI | NULL    | auto_increment |  |
| Payment_mode | Varchar(45) |     | NULL    |                |  |

# 13] ratings table

| Field       | Туре | Key | Default | Extra          |  |
|-------------|------|-----|---------|----------------|--|
|             |      |     |         |                |  |
| id          | int  | PRI | NULL    | auto_increment |  |
| rating      | Int  |     | NULL    |                |  |
| comment     |      |     |         |                |  |
| Customer_id | Int  | MUL | NULL    |                |  |
| Serv_cen_id | int  | MUL | NULL    |                |  |

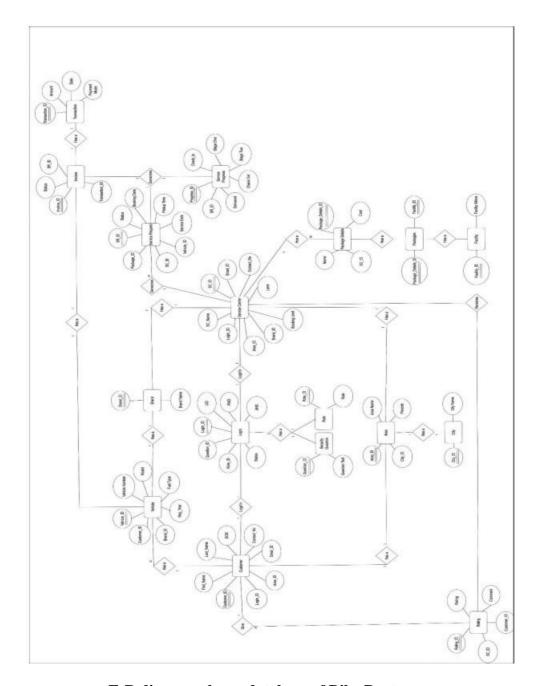
## 14] security questions table

| Field    | Туре        | Key | Default | Extra          |  |
|----------|-------------|-----|---------|----------------|--|
|          |             |     |         |                |  |
| id       | int         | PRI | NULL    | auto_increment |  |
| question | Varchar(45) |     | NULL    |                |  |

## 15] status table

| Field  | Туре        | Key | Default | Extra          |  |
|--------|-------------|-----|---------|----------------|--|
| id     | int         | PRI | NULL    | auto_increment |  |
| status | Varchar(45) |     | NULL    |                |  |

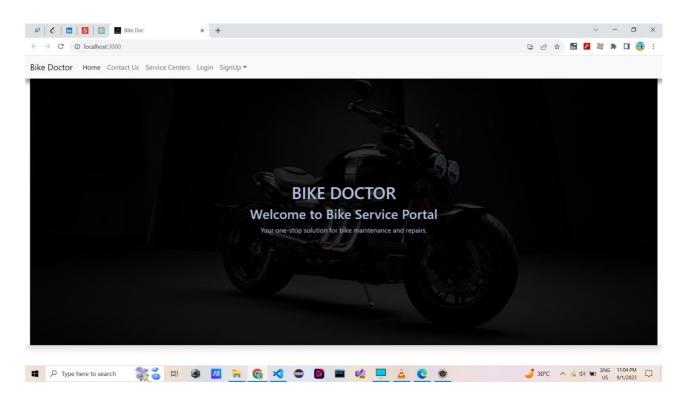
# 7. ER-Diagram:



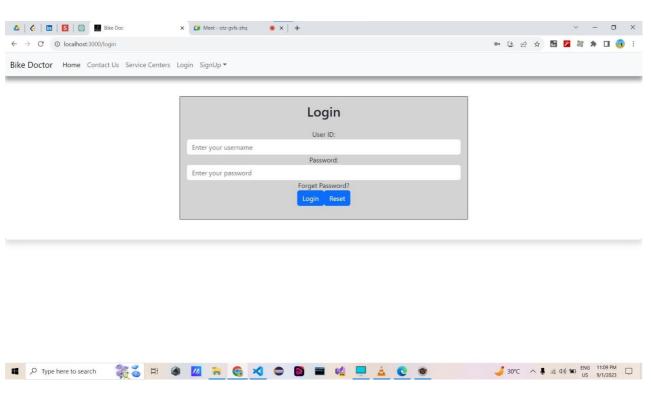
E-R diagram shows database of Bike Doctor

### 8. Snapshots:

### 8.1 Home Page:

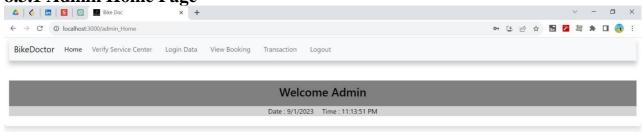


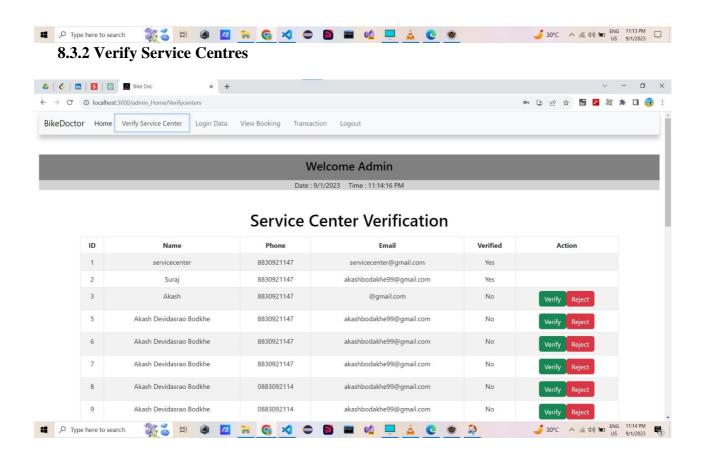
### 8.2 Login Page

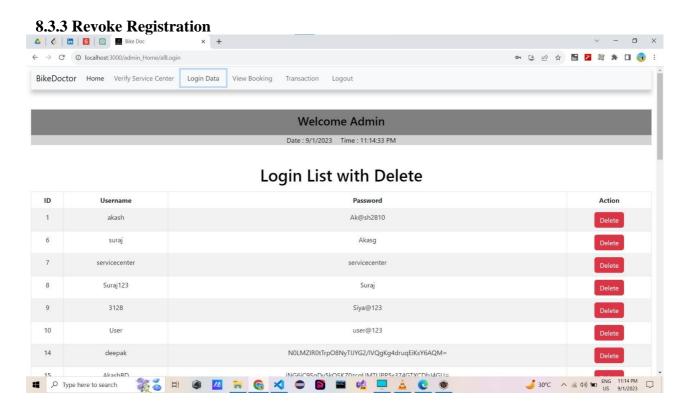


### 8.3 Admin

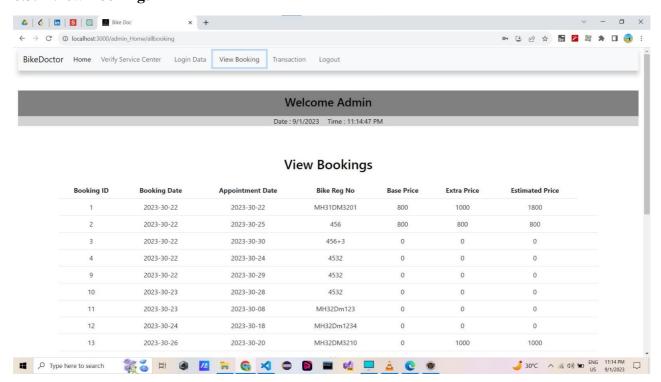
### 8.3.1 Admin Home Page

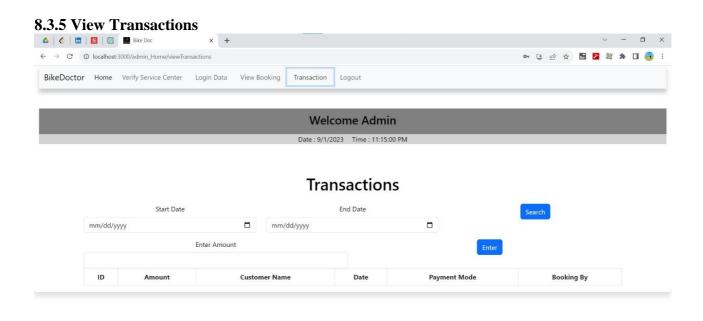


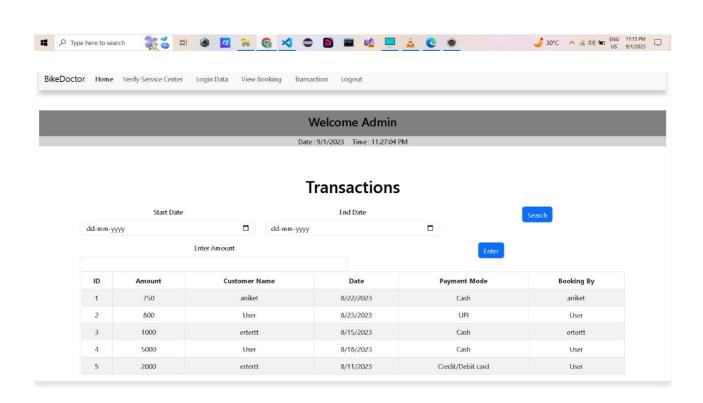




### 8.3.4 View Bookings

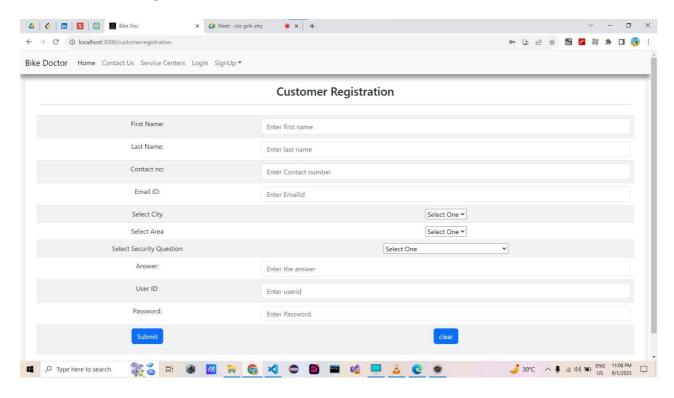




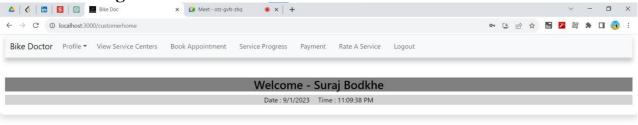


### 8.4 Customer

### **8.4.1** Customer Registration

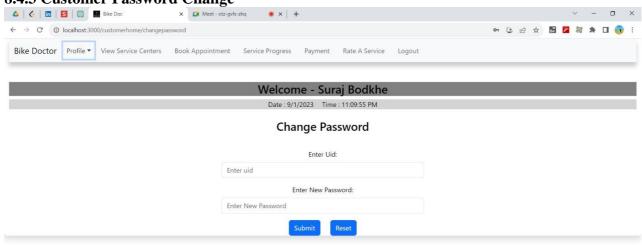


### **8.4.2** Home Page



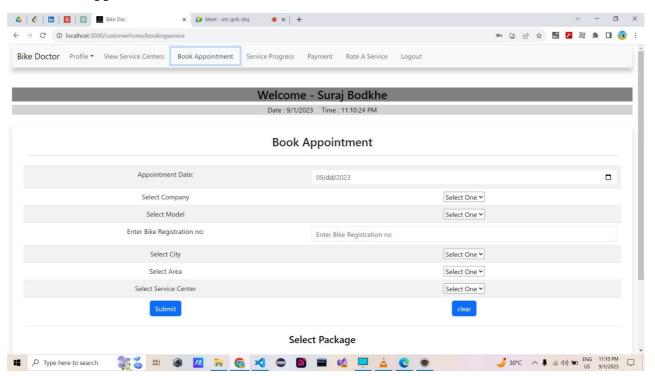


8.4.3 Customer Password Change

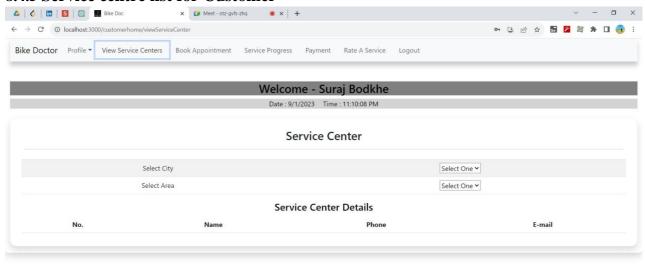




### 8.4.4 Book Appointment

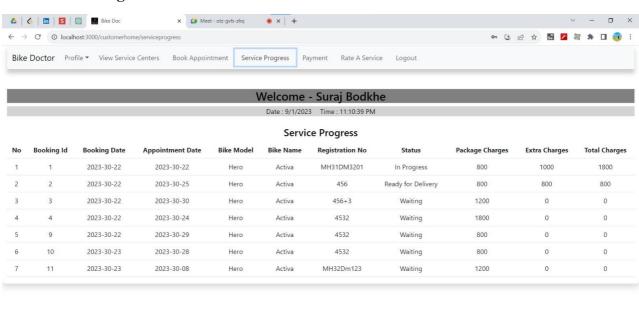


### 8.4.5 Service centre list for Customer



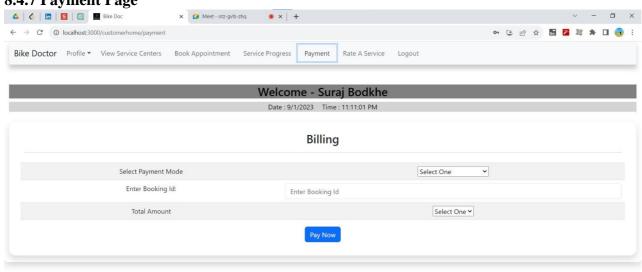


#### **8.4.6 Service Progress**



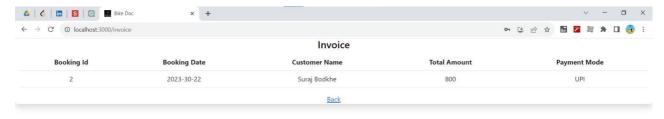


### 8.4.7 Payment Page



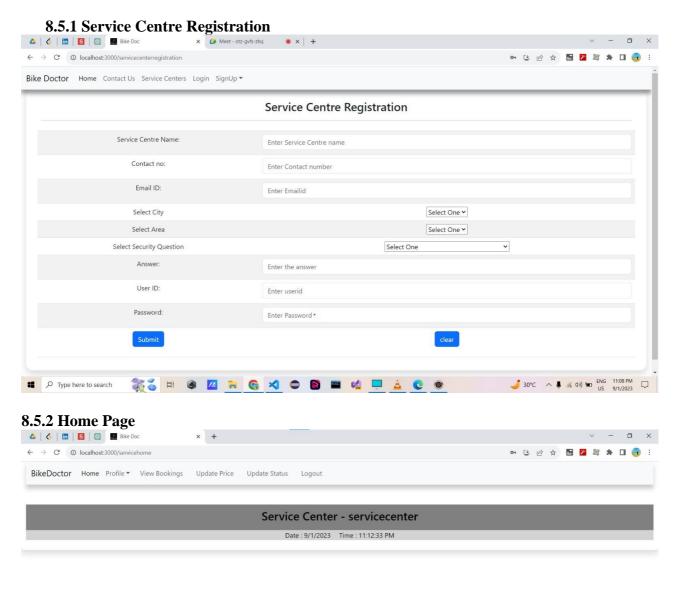


#### **8.4.8 Invoice**

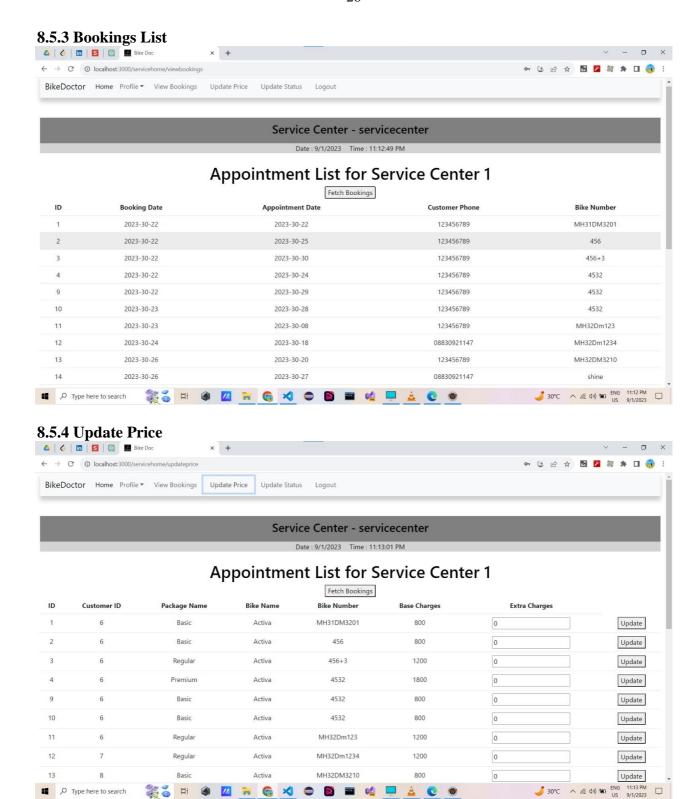




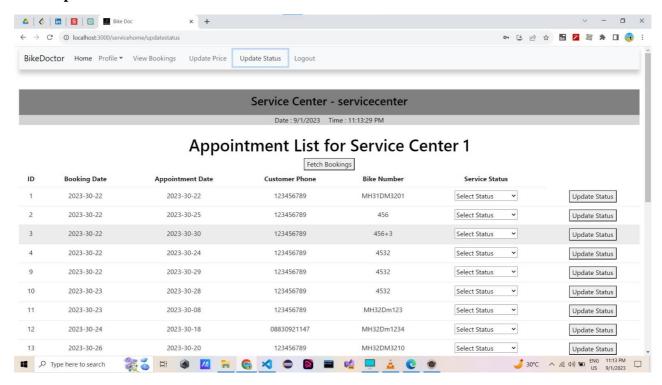
## 8.5 Service Centre







### 8.5.4 Update Status



#### 9. CONCLUSION AND FUTURE SCOPE

BikeDoctor provides a platform for easy and convenient booking of appointment for motorcycle servicing.

The customer can easily book servicing appointment with the preferred service centre from preferred area and can carry out all the further tasks from the portal itself. They can get direct information and updates from the service centre via the portal.

We have multiple objectives in the future scope as providing time slots for even precise bookings and in depth service details. This will also help to increase the scope of the portal from limited cities to a wider scope.