Bike Doctor

Business Requirement Specification

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1. Introduction

1.1 Document Purpose

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

1.2 Project Background

There is no fully dedicated online bike repair system for concerned customers. Currently, the customer goes to the nearest service center. Visiting a service center without any appointment is a problematic situation. The customer must wait for a long period of time. Also, the customer wants to know which service center is the best for his vehicle. Like Rating of service centers.
Service centers also want to scale up the business by having more and more customer base.

1.3 Project Goals

The main goal of this project is to create a platform that will help customers to book appointments for the servicing of their bikes according to their time and quality of service center. This platform will also help service centers to expose themselves to the mass customer base and get good business based on the quality of service and ratings they receive from the customers. The project intends to provide a one-stop solution to put an end to people's search for reliable places for their motorcycle servicing requirements.

1.4 Customers and Stakeholders

Customers:

- Bike owners want to repair their bikes.
- Service centers want customers to come
- Admin wants to provide the platform to the concerned people

Stakeholders:

- Bike owners
- Service centers
- Admin

2. Business Requirement Overview

1. User Registration and Profile Management:
    - Users should be able to create an account and log in to the bike service portal.
    - Users should be able to manage their profile information, including personal details, contact information, and preferences.
2. Bike Service Request:
    - Users should be able to submit service requests for their bikes, specifying the type of service required.
    - Users should be able to provide additional details about their bikes, such as make, model, and any specific issues or requirements.
    - Users should be able to schedule a convenient date and time for the bike service.
3. Service Provider Management:
    - The portal should have a database of authorized bike service providers.
    - Service providers should be able to register and create profiles, providing information about their services, expertise, and location.
    - The portal should allow users to search for service providers based on location.
4. Appointment Management:
    - The portal should have a scheduling system to manage appointments between users and service providers.
    - Users should be able to view available time slots for service and select a suitable appointment.
    - Service providers should be able to manage their schedules and confirm or reschedule appointments.
5. Payment and Invoicing:
    - Users should be able to rate and provide feedback on the service they received.
    - Service providers should be able to view and respond to user reviews.
    - The portal should display overall ratings and reviews for each service provider.

3. Functional Requirements Overview

Vehicle Servicing Systems will consist of three modules as mentioned below.

i) Customer module
ii) Service Center module
iii) Admin module

3.1 Customer module:

- Customers can register and create their new accounts.
- They can log in to their accounts using their credentials.
- In case they forget the password, they can opt to assign a new password.
- Once logged in to the portal, they can select the make and model of their bike and get the base price of servicing for their motorcycle.
- Then they can check the service centers available and their appointment schedules.
- The customer can book the appointment at a desired time slot that is available.
- They can also get updated about the bill of the work done.
- The users can pay through the portal and give ratings to the service center based on their experience.
- Apart from these the customers would be able to read blogs regarding various subjects on the portal.
- They can also opt for Road Side Assistance through the portal where their location would be sent to the service center.

3.2 Service center module:

- The service center can register and create their account on the portal.
- They can log in to the portal using their credentials.
- Once logged in, they can create their slots for servicing appointments.
- They can update the appointment schedule according to the requirement and conditions.
- They can create and update bills of the work being done to a customer's bike.
- They can view the payments received from customers and the transaction records.

3.3 Admin module:

- The admin can log in to the portal using their credentials.
- Once logged in, the admin can view and access all the registered customers and data.
- The admin can also view and access all the service centers information.

- In case of any misconduct, the admin can terminate/delete any registered customer or service center.
- The admin can view all the appointments of any service center.
- The admin can also view all the transactions carried out with the service center.
- The admin can also view the service history of a particular customer.

4. Non-Functional Requirements:

1. Security:
   The security requirement focuses on ensuring the confidentiality, integrity, and availability of data within the bike service system. It involves implementing appropriate security measures to protect user information, prevent unauthorized access, and mitigate potential security threats.

2. Configuration:
   It involves providing an interface or tools for administrators to manage system settings, preferences, and behaviour. The system should allow administrators to customize various aspects, such as service categories, pricing, business rules, and notifications, to align with the specific requirements of the bike service business.

3. Performance:
   The system should be able to handle a high volume of requests and transactions without significant delays or performance issues. It should respond quickly to user interactions and provide efficient service.

4. Scalability:
   The system should be scalable to accommodate an increasing number of users, bikes, and service requests. It should be able to handle growth without impacting performance or user experience.

5. Reliability:
   The system should be always reliable and available for use. It should minimize downtime and ensure that bike service requests can be made and processed without interruptions.

6. Usability:
   The system should have a user-friendly interface that is intuitive and easy to navigate. It should provide clear instructions and feedback to users, enabling them to easily request bike services, track their service status, and make payments.

7. Compatibility:
   The system should be compatible with a wide range of devices, browsers, and operating systems. It should function consistently and effectively across different platforms, ensuring a seamless user experience.

8. Maintainability:
   The system should be designed and developed in a modular and maintainable manner. It should be easy to update, modify, and enhance to accommodate changing business requirements and technological advancements.

9. Data Integrity:
   The system should ensure the integrity and accuracy of data. It should have proper mechanisms in place to prevent data corruption, loss, or unauthorized modifications.

10. Performance Monitoring:
    The system should have monitoring capabilities to track its performance and identify bottlenecks or issues.