Software Requirements Specification (SRS)

Motorcycle Parts Online Selling System

1. Introduction

1.1 Purpose

The purpose of this document is to define the software requirements for a motorcycle parts online selling system. The system will enable customers to browse motorcycle parts, add them to a cart or wishlist, place orders, make payments, and track shipments.

1.2 Scope

This system will support:

- Customer registration and authentication
- Motorcycle parts browsing and categorization
- Shopping cart and wishlist functionalities
- Order processing and payment handling
- Shipment tracking

1.3 Intended Audience

This document is intended for developers, project managers, testers, and stakeholders involved in the development of the motorcycle parts online selling system.

1.4 Definitions and Acronyms

- **ERD**: Entity Relationship Diagram
- **SKU**: Stock Keeping Unit
- **SRS**: Software Requirements Specification

2. Overall Description

2.1 Product Perspective

The motorcycle parts online selling system will be a web-based application with a user-friendly interface that enables seamless browsing, purchasing, and order management.

2.2 User Characteristics

Users will include:

- **Customers**: Can browse motorcycle parts, add them to cart or wishlist, place orders, and make payments.

- **Admin**: Can manage parts, categories, orders, and shipments.

2.3 Constraints

- Secure payment processing must be ensured.

- The system should be scalable to support large amounts of users and transactions.

3. Functional Requirements

3.1 Customer Management

- Customers can register and log in.

- Customers can update their profile information.

3.2 Motorcycle Parts Management

- Admin can add, edit, and delete motorcycle parts.

- Each part is associated with a category.

3.3 Shopping Cart & Wishlist

- Customers can add and remove motorcycle parts from the cart.

- Customers can save motorcycle parts to a wishlist.

3.4 Order Processing

- Customers can place orders from the cart.

- Orders should store details like order date, total price, and order items.

3.5 Payment Management

- Customers can make payments using different methods.

- Payments are linked to orders.

3.6 Shipment Management

- Orders will have associated shipments.

- Shipments contain address details.

4. Non-Functional Requirements

- **Security**: Secure authentication and payment processing.

- **Performance**: Fast response time for product searches and order placements.

- **Scalability**: Support for a large number of users and transactions.

5. System Models

5.1 ERD Overview

The system follows an ERD structure with entities like Customer, Motorcycle Part, Order, Payment, Shipment, Cart, and Wishlist, ensuring proper data relationships.

6. Appendix

References: ERD diagram for database design.