



## ***THE ISLAMIA UNIVERSITY OF BAHAWALPUR(IUB)***

**DEPARTMENT OF INFORMATION TECHNOLOGY**

**Version: 1.0**

**Date:** *5Dec2025*

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**Section:** *5M (7th Semester)*

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# ***SOFTWARE REQUIREMENTS SPECIFICATION (SRS)***

***Product Selling Website – “Khan Products”***

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## **1. INTRODUCTION**

### **1.1 Purpose**

The purpose of this Software Requirements Specification (SRS) document is to describe the complete software requirements for the **Product Selling Website** developed for *Abdul Ghafoor*.

This SRS serves as a standard reference for:

- Project stakeholders
- Developers
- Testers
- Project managers
- UI/UX designers

It provides a clear blueprint of the system's **features, functionalities, limitations, constraints, and design requirements**.

### **1.2 Scope**

This project is an **E-Commerce Web Application** built with:

- **Frontend:** HTML, CSS, JavaScript
- **Backend:** PHP
- **Database:** MySQL
- **Development Environment:** VS Code

The website will enable customers to browse products, view details, add items to cart, purchase products, and track orders.

The **Admin Panel** will enable admins to manage:

- Products
- Categories
- Orders
- Customers

The system will provide secure authentication, payment options (COD), responsive UI, and a smooth shopping experience.

### **1.3 Definitions, Acronyms, Abbreviations**

- **SRS:** Software Requirements Specification
- **UI:** User Interface
- **CRUD:** Create, Read, Update, Delete
- **PHP:** Hypertext Preprocessor
- **HTML:** Hypertext Markup Language
- **CSS:** Cascading Style Sheets
- **JS:** JavaScript
- **DBMS:** Database Management System

### **1.4 References**

- MySQL Documentation
  - PHP Documentation
  - E-Commerce UI/UX Design Standards
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## **2. OVERALL DESCRIPTION**

### **2.1 Product Perspective**

The system is a **web-based standalone product**.

It includes:

- User Interface
- Admin Panel
- Product Database
- Order Processing System
- Authentication Module

The system interacts with:

- Email server (notifications)
- Payment gateway (optional future integration)

### **2.2 Product Features Summary**

- User registration & login
- Product listing & search
- Product detail pages
- Shopping cart functionality
- Checkout (Cash on Delivery)
- Order tracking

- Admin dashboard
- Product/category management
- User management
- Order status updates

## ***2.3 User Classes and Characteristics***

### ***Customer***

- Basic computer knowledge
- Can browse, place orders
- Performs search and category filtering

### ***Admin***

- Has advanced permissions
- Manages website data
- Can modify and delete records

## ***2.4 Operating Environment***

- **Browser:** Chrome
- **OS:** Windows
- **Server:** XAMPP/Apache
- **Database:** MySQL
- **Development:** VS Code

## ***2.5 Design Constraints***

- Must use HTML, CSS, JS, PHP, MySQL
- Security measures required

- Must be responsive
- Must support CRUD operations

## ***2.6 Assumptions & Dependencies***

- Users have internet access
  - Hosting supports PHP & MySQL
  - Browser supports HTML5 & CSS3
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## **3. SYSTEM FEATURES**

Each feature includes:

- Description
  - Functional Requirement
  - Input
  - Output
  - Priority
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### ***3.1 User Registration***

#### ***Description:***

Allows new users to create an account.

#### **Functional Requirements**

- User must provide email, password, phone, name.
- System validates unique email.
- System stores encrypted password.

***Inputs:***

- Name
- Email
- Password
- Contact number

***Outputs***

- Success or error message
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***3.2 User Login***

***Description:***

Allows registered users to log in.

***Functional Requirements:***

- System validates email & password.
  - System creates a user session.
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***3.3 Browse Products***

***Functional Requirements:***

- Customer views product list.
  - Images, price, and stock displayed.
  - Pagination supported.
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### **3.4 Product Details Page**

#### ***Functional Requirements:***

- Displays full product info.
  - Allows customer to add item to cart.
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### **3.5 Shopping Cart**

#### ***Functional Requirements:***

- Add items
  - Remove items
  - Update quantity
  - Show total amount
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### **3.6 Checkout (COD)**

#### ***Functional Requirements:***

- Customer provides delivery address
  - System stores order
  - Status = Pending
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### **3.7 Order Tracking**

#### ***Functional Requirements:***

- Customer views order status
- Status types: Pending, Packed, Shipped, Delivered

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### **3.8 Admin Dashboard**

#### **Features:**

- Total Customers
  - Total Orders
  - Total Sales
  - All products list
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### **3.9 Admin Product Management**

#### **Functional Requirements:**

- Add product
  - Edit product
  - Delete product
  - Upload image
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### **3.10 Admin Order Management**

#### **Functional Requirements:**

- Update order status
  - View customer details
  - View product list in order
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## **4. SYSTEM REQUIREMENTS**

## **4.1 Functional Requirements (FR)**

**FR-001 User Registration**

**FR-002 User Login**

**FR-003 Browse Products**

**FR-004 Add to Cart**

**FR-005 Checkout**

**FR-006 COD Payment**

**FR-007 Admin Login**

**FR-008 Add/Edit/Delete Product**

**FR-009 Manage Orders**

**FR-010 Update Order Status**

**FR-011 Manage Categories**

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## **5. NON-FUNCTIONAL REQUIREMENTS (NFR)**

### ***5.1 Performance Requirements:***

- System must load pages within **3 seconds**
- Must support **50–200 users simultaneously**

### ***5.2 Safety Requirements:***

- Data backup every 24 hours
- power failure recovery

### ***5.3 Security Requirements:***

- Password hashing
- SQL Injection protection
- Session management

#### **5.4 Reliability Requirements:**

- 99% uptime
- Automatic error logging

#### **5.5 Usability Requirements:**

- Navigation must be easy
  - Responsive design required
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### **6. DATABASE DESIGN (ER DIAGRAM)**

[Admin] manages → [Products]

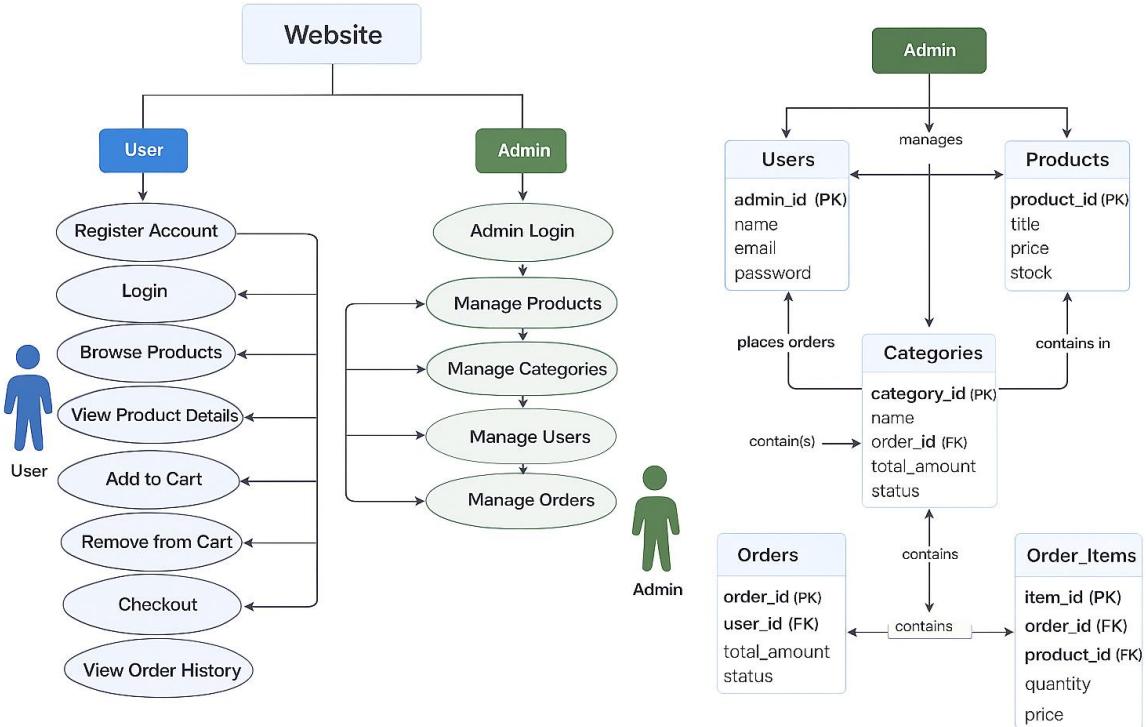
[User] places → [Orders]

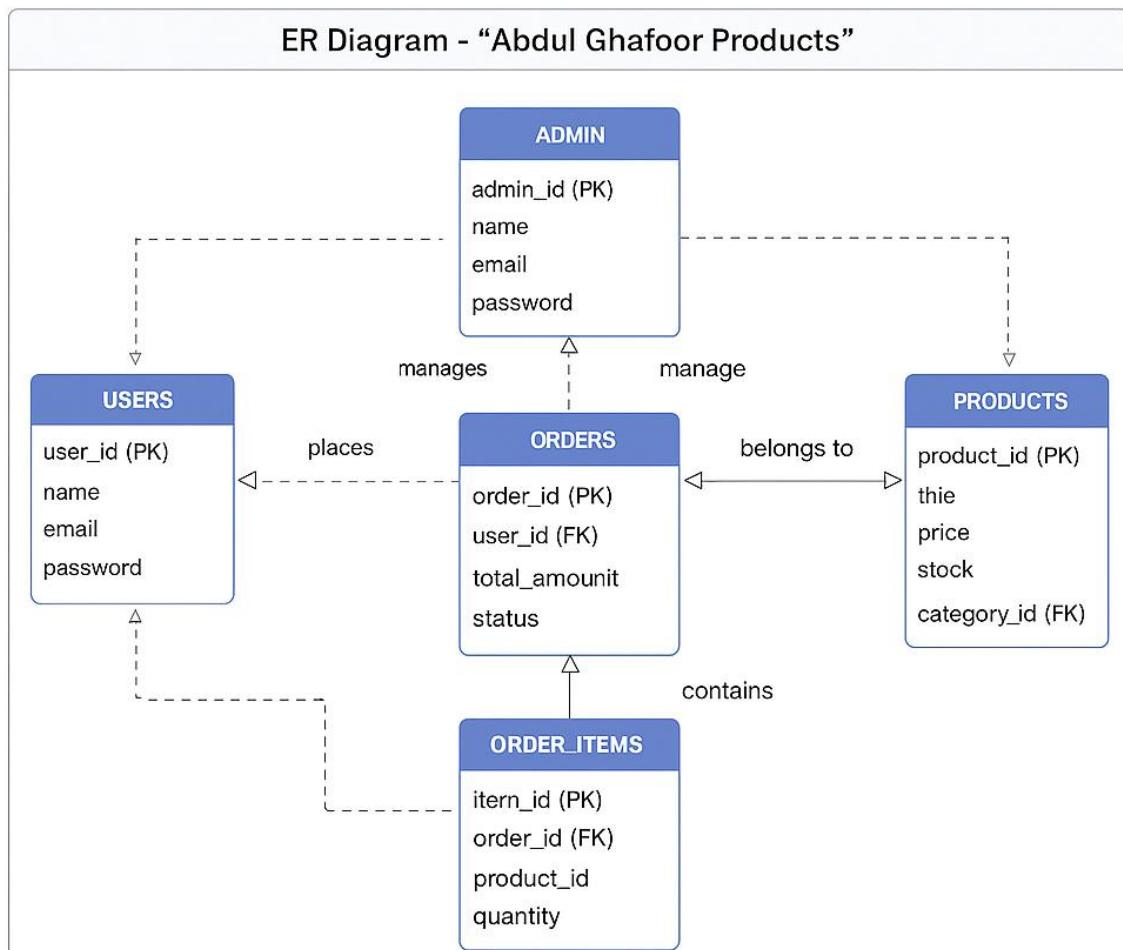
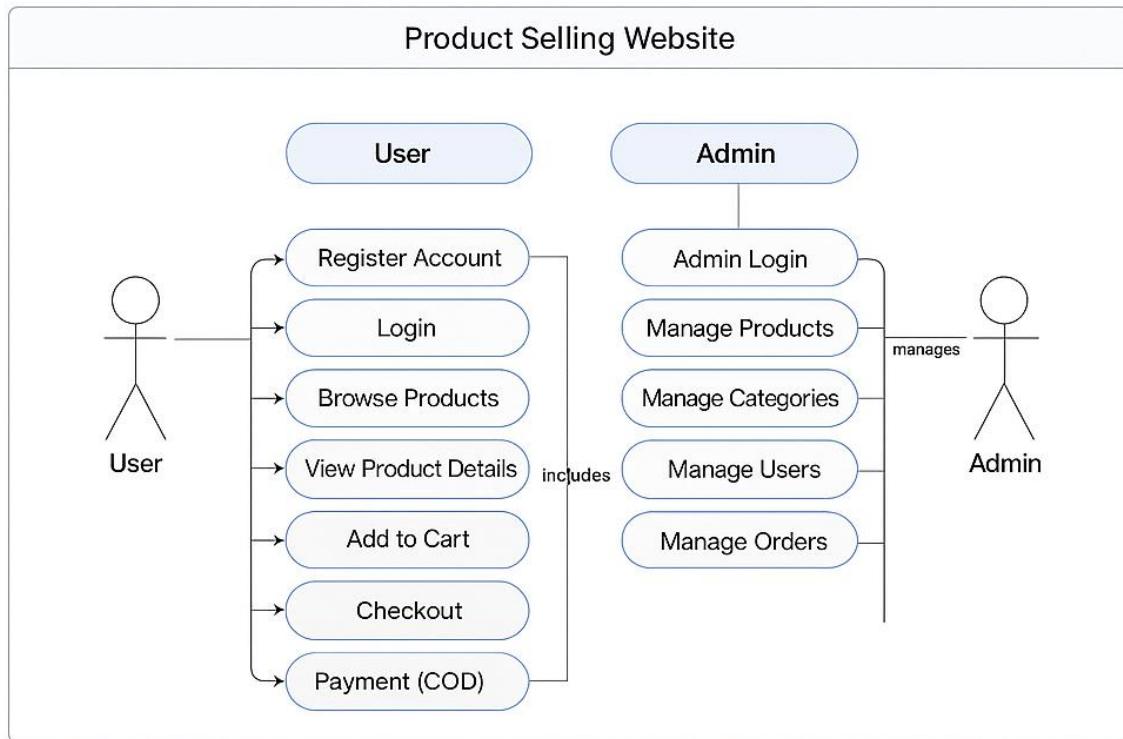
[Orders] contains → [Order Items]

[Products] belongs to → [Category]

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### **7. USE CASE DIAGRAMS (ADMIN + USER)**





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## **8. USE CASE DESCRIPTIONS**

### ***Use Case UC-01: Register Account:***

- Actor: User
- Description: Create a new account
- Pre-condition: Not logged in
- Post-condition: Account created

### ***Use Case UC-02: Login***

### ***Use Case UC-03: Add to Cart***

### ***Use Case UC-04: Checkout***

### ***Use Case UC-05: Admin Adds Product***

### ***Use Case UC-06: Admin Updates Order***

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## **11. INTERFACE REQUIREMENTS**

### **11.1 User Interface**

- Header
- Footer
- Search bar
- Product listing
- Cart panel
- Profile dashboard

### **11.2 Admin Interface**

- Sidebar

- Product table
  - Order table
  - Charts
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## **12. HARDWARE REQUIREMENTS**

### ***For Server***

- 4GB RAM
- 20GB storage
- PHP + MySQL support

### ***For Client***

- Any device with browser
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## **13. SOFTWARE REQUIREMENTS**

- XAMPP
  - VS Code
  - PHP 8+
  - MySQL 5+
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## **14. COMMUNICATION REQUIREMENTS**

- Email notification
  - Contact form
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## **15. SYSTEM LIMITATIONS**

- Only COD payment (phase 1)
  - No mobile app (web only)
  - No AI recommendations
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## **16. FUTURE ENHANCEMENTS**

- Online payments
  - Product reviews
  - Mobile app
  - Seller accounts
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## **17. APPENDICES**

- Screen layout sketches
- Sample database tables
- Dummy data