Benazir Bhutto Shaheed University Lyari, Karachi

CS-564 Software Verification & Validation

SRS Document

Project Title	**Royal Aurum:** Web-Based Marketplace for Luxury Jewelry
Semester	6th
Section	A
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Royal Aurum — Web-Based Luxury Jewelry Marketplace

1. Introduction

1.1 Purpose

The purpose of this document is to define the software requirements for **Royal Aurum**, a web-based platform designed to allow customers to browse, select, and purchase premium jewelry online.

1.2 Scope

Royal Aurum provides an elegant and secure online shopping experience. The system enables customers to view jewelry products, add them to a shopping cart, and complete purchases via a secure payment gateway. The admin can manage products, monitor orders, and maintain the platform efficiently.

1.3 Intended Users

- **Customers:** To browse and buy jewelry.

- **Admin:** To manage products, orders, and user information.

1.4 Technologies Used

HTML, CSS, JavaScript, PHP, and MySQL.

2. Overall Description

2.1 Product Perspective

Royal Aurum is an independent web application consisting of a front-end interface for customers and an admin panel for management. It connects to a MySQL database to store product, user, and order data.

2.2 Product Functions

- Product browsing and searching
- Shopping cart management
- Secure checkout and payment
- Order confirmation
- Admin product and order management

2.3 Constraints

- Internet connection required
- Browser compatibility (Chrome, Firefox, Edge)
- Secure handling of payment data

2.4 Assumptions and Dependencies

- The server supports PHP and MySQL.
- A valid payment gateway API is integrated.
- Users have access to modern web browsers.

3. Functional Requirements

FR1 – View Products: Users can browse, view details, and search jewelry items by category or keyword.

FR2 – Add to Cart: Users can add items to their shopping cart, view selected products, and remove them as needed.

FR3 – Checkout & Payment: Users can proceed to checkout and make payments through a secure payment gateway.

FR4 – Order Management: The admin can view, update, or delete customer orders as required.

FR5 – Product Management: The admin can add, edit, or remove jewelry products from the catalog.

FR6 – User Management: The admin can view and manage registered user accounts and information.

4. Non-Functional Requirements

Performance: The system should load all main pages within 3 seconds to ensure a smooth user experience.

Security: All user data and payment transactions must be securely encrypted.

Usability: The interface should be elegant, simple to navigate, and responsive on all devices.

Reliability: The platform should maintain 99% uptime during normal operation.

Scalability: The system should be capable of handling more users and products as the business grows.

5. System Design Overview

- **Front-End:** HTML, CSS, JavaScript

- **Back-End:** PHP

- **Database:** MySQL

- **Architecture:** Client–Server model

6. Future Enhancements

- Integration of vendor/seller module

- Advanced product filters and reviews

- Mobile application version

7. Conclusion

Royal Aurum is designed to deliver a premium online shopping experience for jewelry lovers through a secure, efficient, and user-friendly web platform.