# Software Requirements Specification (SRS) For E-commerce website (Semester Project)

# **OLX For Pak-Austria**

Version 1.0

# Prepared by:

- ✓ Sufyan Hummam Mushtaq
- ✓ Jawad-ul-Islam Khan,
- ✓ Abuzar Khan

# **Organization:**

**PAF-IAST** 

#### Date:

14/10/2024

#### **Table of Contents**

#### 1. Introduction

- 1.1 Purpose
- 1.2 Scope
- 1.3 Definitions, Acronyms, and Abbreviations
- 1.4 References
- 1.5 Overview

# 2. Overall Description

- 2.1 Product Perspective
- 2.2 Product Functions
- 2.3 User Classes and Characteristics
- 2.4 Operating Environment
- 2.5 Design and Implementation Constraints
- 2.6 Assumptions and Dependencies

# 3. System Requirements

- 3.1 Functional Requirements
- 3.1.1 User Registration and Login
- 3.1.2 Product Submission by Users
- 3.1.3 Product Listings by Admin
- 3.1.4 Search and Filters
- 3.1.5 Messaging System
- 3.2 Non-functional Requirements
- 3.2.1 Performance Requirements
- 3.2.2 Security Requirements
- 3.2.3 Usability Requirements
- 3.2.4 Reliability Requirements
- 3.2.5 Regulatory Requirements

#### 4. System Models

- 4.1 Use Case Diagrams
- 4.2 Sequence Diagrams
- 4.3 Data Flow Diagrams

#### 1. Introduction

# 1.1 Purpose

This document outlines the software requirements for **OLX Pak-Austria**, a website designed exclusively for the university where users can submit product details to an admin, and the admin will be responsible for posting the listings. This allows users within the university to browse and buy available products.

# 1.2 Scope

The website will serve as a platform for buying and selling goods within the Pak-Austria Fachhochschule University community. Users will submit details of the products they wish to sell, which the admin will verify and post on the site. Buyers can browse listings and contact sellers to make purchases. The platform will not handle transactions or payments directly; users will manage those outside the platform.

# 1.3 Definitions, Acronyms, and Abbreviations

- **OLX**: Online platform for submitting, listing, and buying products.
- **SRS**: Software Requirements Specification.
- **UI**: User Interface.
- \* Admin: The person responsible for verifying and posting product listings.

#### 1.4 References

• Provided SRS Template.

#### 1.5 Overview

This SRS document outlines the functional and non-functional requirements for the **OLX Pak-Austria** website, which will allow university users to submit products for sale and browse listings posted by an admin.

# 2. Overall Description

#### 2.1 Product Perspective

**OLX Pak-Austria** will operate as a university-specific platform where students, faculty, and staff can buy and sell goods. Instead of directly posting their products, users will send product details to the admin, who will verify and post the listings. The platform serves as a middleman, facilitating secure product postings within the university.

#### 2.2 Product Functions

Key functionalities include:

- User registration and login
- Product submission to the admin for posting
- Admin-managed product listings
- Product search and filtering options
- Messaging between buyers and sellers for communication (May or may Not)

#### 2.3 User Classes and Characteristics

The platform has two primary types of users:

- **Buyers**: University users looking to browse and purchase products.
- **Sellers**: Users who submit their product details to the admin for posting.
- \* Admin: Responsible for verifying and managing the product listings on the website.

### 2.4 Operating Environment

The system will be accessible via web browsers on desktop and mobile devices. It will operate in the following environment:

- \* Web: Accessible through major browsers like Chrome, Edge and Firefox.
- **Backend:** Hosted on a secure server within the university.

# 2.5 Design and Implementation Constraints

- ❖ The system will depend on admin verification before any product listing goes live.
- User data, including product submissions, must be stored securely to prevent unauthorized access.

# 2.6 Assumptions and Dependencies

- \* The platform relies on the admin's active involvement to manage and verify product listings.
- Payment and transaction processes will occur outside the platform, as it is only designed to facilitate product listings and communication.

#### 3. System Requirements

# 3.1 Functional Requirements

# 3.1.1 User Registration and Login

#### **Description:**

Users will be required to create accounts to submit or browse products.

#### **Functional Requirements:**

- ❖ The system shall allow users to register and log in using university-issued email addresses.
- Users can reset their password via an email recovery system.

### 3.1.2 Product Submission by Users

# **Description**:

Users will submit details about products they wish to sell. These details will be sent to the admin for verification and posting.

# **Functional Requirements:**

- The system shall allow users to submit product details, including images, descriptions, and pricing.
- Submitted products must go through admin verification before being posted live.

# 3.1.3 Product Listings by Admin

### **Description**:

Admins will verify and post product listings for users to browse.

## **Functional Requirements:**

- Admins will have the ability to approve, reject, or edit product submissions before posting them
- ❖ The system shall allow admins to delete or modify listings if needed.

#### 3.1.4 Search and Filters

#### **Description**:

Buyers will be able to search and filter products based on categories like electronics, books, and clothing.

# **Functional Requirements:**

❖ The system shall allow users to filter products by category, price, and condition (new/used).

#### 3.1.5 Messaging System

#### **Description:**

Once a product is listed, buyers and sellers can communicate via a messaging system on the platform.

# **Functional Requirements:**

❖ The system shall provide an internal messaging service to facilitate communication between buyers and sellers without revealing personal contact information.

# 3.2 Non-functional Requirements

# 3.2.1 Performance Requirements

- ❖ The system shall support up to 1,000 users accessing the platform simultaneously.
- Listings and search results shall load within 3 seconds.

## 3.2.2 Security Requirements

- ❖ All user data, including product submissions, must be encrypted both in transit and at rest.
- ❖ The platform must use HTTPS protocols to ensure secure communication between users and the website.

# 3.2.3 Usability Requirements

- ❖ The website must have an intuitive interface that is easy to navigate for all users.
- \* Admin actions, like verifying and posting products, should be streamlined for efficiency.

### 3.2.4 Reliability Requirements

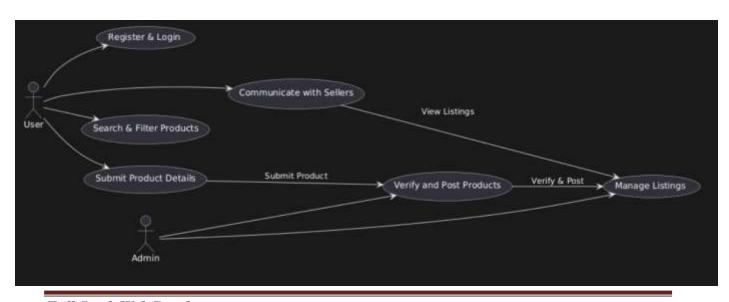
- ❖ The platform must maintain an uptime of 99% to ensure availability for users.
- \* Admins should have backup access to the system in case of server issues.

# 3.2.5 Regulatory Requirements

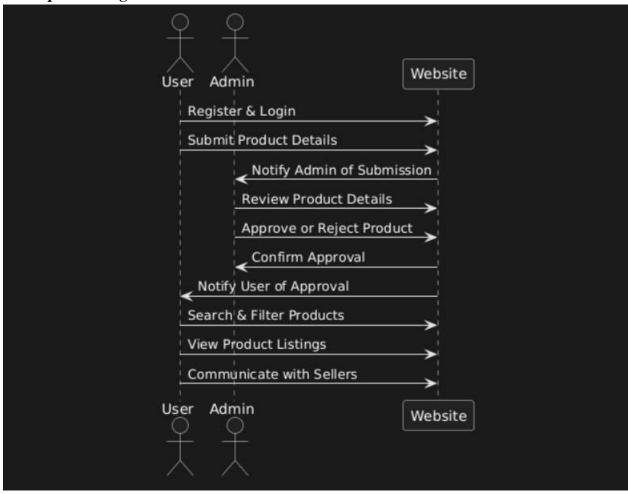
❖ The platform must comply with university policies and privacy laws, ensuring that personal data is protected.

#### 4. System Models

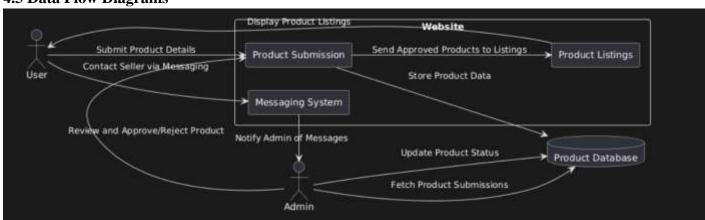
# **4.1 Use Case Diagrams:**



# 4.2 Sequence Diagrams:



#### **4.3 Data Flow Diagrams**



❖ The above models are generated by PlantUML code and run by online PlantUML editor.