
Software Requirements Specification

for

Online Sales Portal

Version 1.0 approved

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16th March, 2021

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Revision History

Name	Date	Reason For Changes	Version

1.Introduction

1.1 Purpose

The main objective of the On-line Sales Portal (OSP) is to set up an on-line portal where people can buy and sell on the same platform. (*A one-stop store for both the buyer and the seller*) The Software Requirements Specification (SRS) document provides a detailed description of the On-line Sales portal . It explains features and interfaces of the portal.

1.2 Document Conventions

The document is written in Times New Roman Font of size 11. Main headings (size 18) and subheadings (size 14) are written in bold. Some important points in the document are written in Italics. (size 11)

In some of the cases mentioned below the customer can be a seller or a buyer based on the situation.

1.3 Intended Audience and Reading Suggestions

This document is intended for *Developers, and Software companies* who intend to develop or work with this portal (so that they are aware of the dependencies of the application and how it works) and for the *Managers, Sellers and Buyers* (so that they know what all features this application is having).

This SRS contains the structure of the application as well as the required hardware and software dependencies of the application, which must be present for the application to function smoothly. For reading this SRS, the reader must have a basic knowledge of *Object Oriented Programming, Web Development Frameworks* . The reader must also have some knowledge about *UML diagrams*.

1.4 Product Scope

- This Software system will be an On-line Sales portal for a Company.This is designed to make an online platform on the web where different persons can buy and sell products to each other.
- OSP should be able to *create an account* for either Manager or Customer based on the user choice and on creation of an account it should be able to *generate an unique ID and Password* for the user.
- OSP should be able to *communicate the generated ID and Password to the user through email*.
- OSP should provide an option for a *user to change password* if requested by the user.
- Manager is responsible for control of the entire buy and sell system.
- OSP should provide options by which the *manager categorizes the available products in the portal* and should be able to *add / remove the categories if required*.
- OSP should provide an option for *seller to upload the information regarding the item* he/she wants to sell .
- Similarly options for the *buyer to search for an item , raise a request to buy , negotiate the selling price with the seller and pay money online*.

1.5 References

Although the basic outline of the SRS was provided, another website was referred to while the making of this document

- <https://krazytech.com/projects/sample-software-requirements-specificationsrs-report-airline-database>

2. Overall Description

2.1 Product Perspective

This system is designed to make an online platform on the web where different persons can buy or sell products to each other. There is an option for Customer Login where different people can login to buy or sell their product. The customers who are involved in buying and selling, can negotiate the price for an item between them and buy products. There is also an option for online money transactions if the deal is confirmed between buyer and seller. Moreover, there is a scope for manager login which is restricted to specific persons. Manager is responsible for the control of the entire buy and sell systems. There are various categories of items that can be bought or sold. Moreover, the manager has the right to add or remove these categories.. If the manager suspects any customer to be a fraud, he can remove the items he has uploaded to sell online and delete his account. The system also contains a database containing a list of customers, buyers, sellers and items.

2.2 Product Functions

- A customer can buy or sell an item over the platform.
- To upload an item, customer has to give specifics about the item and its price. (Refer - Section 3)
- If a buyer is interested in purchasing an item, he can raise a request and his bid price.
- The raised price is negotiable and if both groups come into terms, items can be purchased.
- Payment mode for the shopping is online.
- Manager have certain powers which is described later (Refer - Section 3)

2.2.1 For Users (Basic Account features)

- Sign In / Sign Up
- Resetting Password
- Account Details
- Search Browser (To search required items)
- Search Filter
- Shopping Cart
- Shopping History , Search History and Transaction History
- Online Payment gateway

2.2.2 For Manager (Extra features are added)

- Authorizing the Sales and Requests
- Updating Product Information
- Managing categories of products
- Updating the information regarding Sellers and Buyers
- Monitoring transactions (In case of errors)

2.3 User Classes and Characteristics

The user classes who use this product are :

- People who are interested in buying and selling products online. It may also include buying and selling of products which are already used (i.e Second Hand).
- Also people who want to start their business and startups similar to Amazon, Flipkart or eBay may also use this system to a great extent, where they can only sell their products.
- Manager who manages the entire buy and sell systems.

2.4 Operating Environment

Since it is an online portal software, it requires internet connection and a background server as the only hardware platform to operate. Also there should be a database system available to keep the record of different customers and products.

2.5 Design and Implementation Constraints

In order to create good software design, constraints and other contingencies need to be addressed. In this section we will enumerate considerations that must be made when creating this project.

- Must be coded efficiently enough to run well on provided server hardware
- Client side code and/or web pages must be able to run efficiently on low end hardware
- The database will be created and maintained in a way that makes it of reasonable size.

2.6 User Documentation

Brief description and a simple go through of SRS document would be sufficient for understanding the working of the On-line Sales Portal. Along with this, a user's manual which shows the portal through pictures would be handy for quick references to the various features that the portal has.

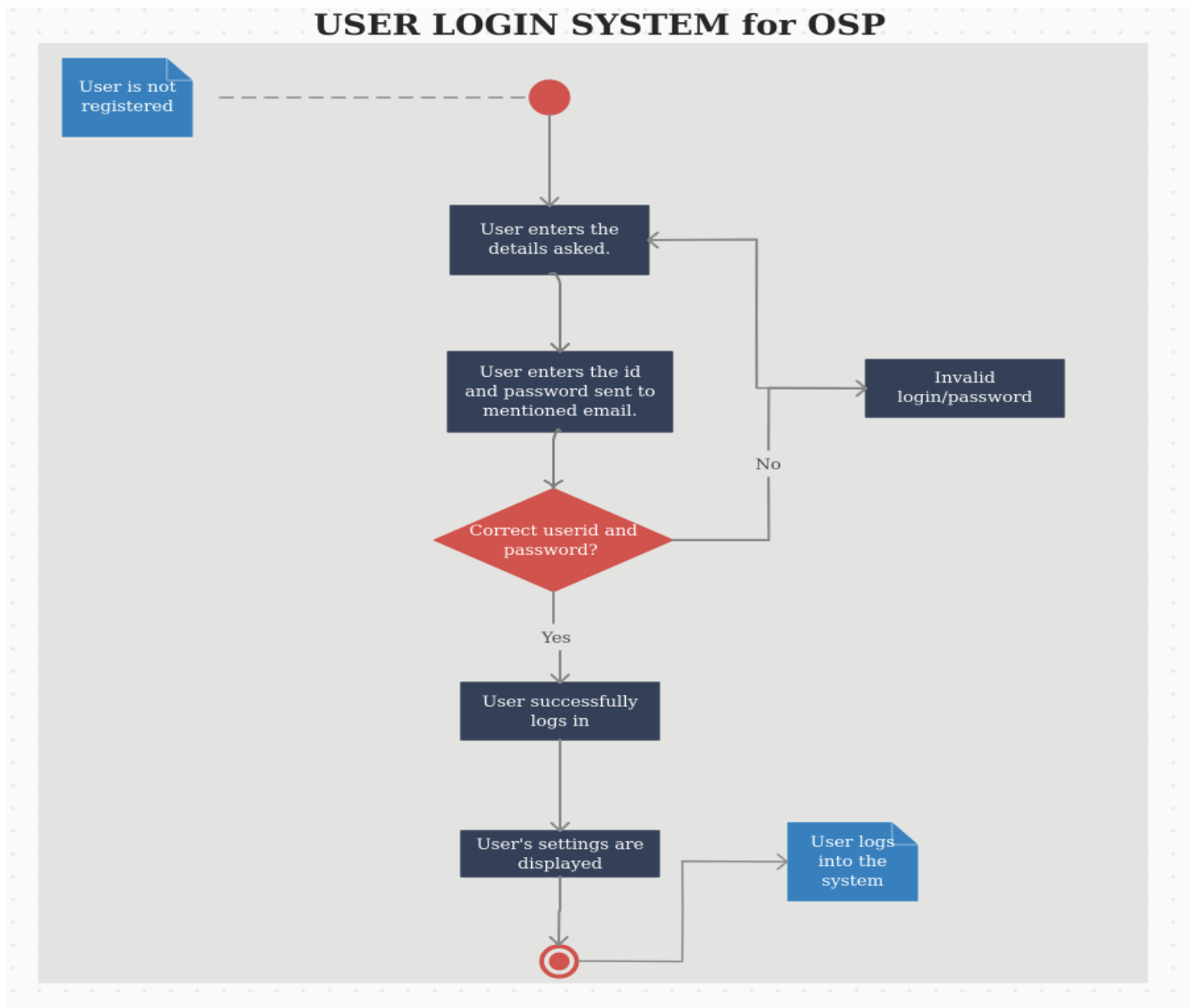
2.7 Assumptions and Dependencies

- Since the whole portal is implemented in the English Language, the users of this portal are expected to be comfortable with the basics of English Language.
- The users are supposed to know the basics of using Laptops or other similar devices from which they use the portal.
- A product that is either sold or already bought by a customer cannot be returned in any case.

3. External Interface Requirements

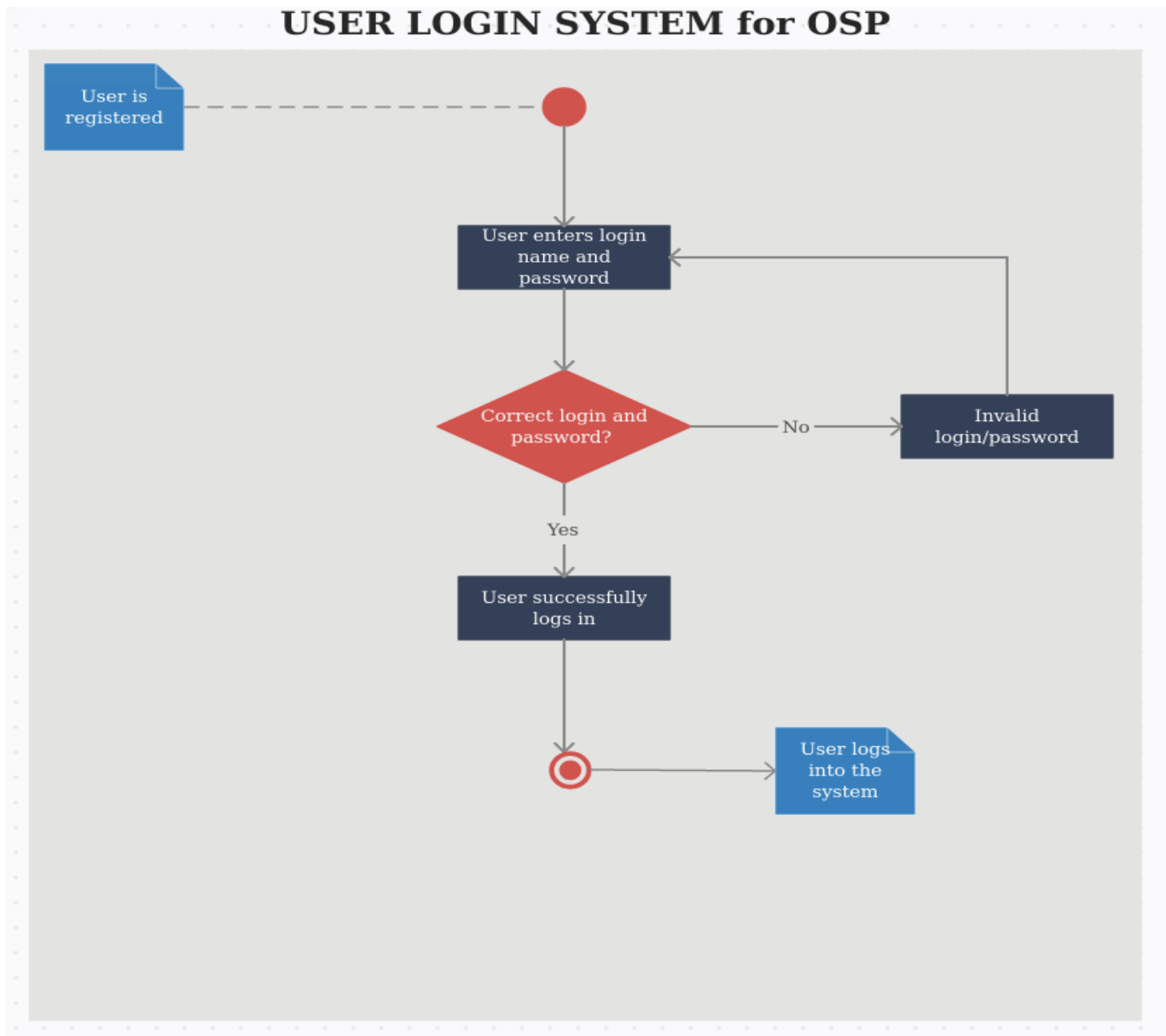
3.1 User Interfaces

Activity Flow Diagram for an Unregistered User



Note: The user can be a manager or a customer.

Activity Flow Diagram for an Registered User



3.2 Hardware Interfaces

The Software is supported on any web based browser. Apart from that a hardware is required on the server side to support database software like MySQL, which is required to store all the information regarding sales and purchase of products. All the data entered by the different users are stored in the server of the company, using SQL as an intermediate software.

3.3 Software Interfaces

Initially the user can register as a Customer or as a Manager.

In order to make a request for buying Login is necessary. User can now Login as a Customer or as Manager, for this he has to provide UserId and Password.

This userid and password will be validated from the database.

Object will be created accordingly in the database on signup if details provided are correct. Database is a class whose only one object will exist which would be made when the software opens. Any change in the Database will be made in this single object and it will be updates in the file when software closes.

As soon as Customer Object is created, Customer can add/remove his items in the database, these functions will be performed in the database file when the customer object is being destroyed.

Different functions will be called for different functionalities such as Adding an item, Removing an Item, Setting a price for an item , etc..

Similarly, As soon as a Manager Object is created, the Manager can add/remove categories ,review an item and remove a customer from the database. In this case functions will be called for functionalities like deletion of an account,remove categories, remove product , etc..

3.4 Communications Interfaces

Communications are done through email.

4. System Features

4.1. Account Registration

Stimulus: Click "Sign up" Button

REQ-1. The system shall allow a non-registered user to create a secure account.

REQ-2. The system shall require the following information if the user is manager: Name, Gender, Date-of-Birth, Address including house no, street, locality and city, Telephone number, Email, IM ID.

REQ-3. The system shall require the following information if the user is a customer: Name, city, Telephone number, Email, IM ID(optional).

REQ-4. The system will mail a unique id and password if the details are valid. Passwords can be changed later.

REQ-5. The system shall store the information in the database.

4.2. Sign in

The users have to log into their account whenever they want to use the sales portal.

REQ-1. The system shall require a username and password from the user.

REQ-2. The system will verify the username and password, and the user will be considered “logged-in”.

4.3. Search

The users can search for the item of their choice.

4.4. Add to Shopping Cart

Buyers have to add the items of their choice to their shopping carts, in order to purchase them.

The shopping cart shall display the list of items selected by the user and the total cost of the books.

Stimulus: Click "Add to Shopping Cart" Button

REQ-1. The system shall allow a registered and logged-in user to temporarily save items that are being considered for purchase into a list associated with their account

REQ-2. When viewing the shopping cart list, the system shall display the total price of the books in the cart.

4.5. Delete

The user can delete items added to the shopping cart as per his/her requirement.

The shopping cart shall indicate the list of items left in the cart after the deletion operation and their total cost.

Stimulus: Click "Delete from Shopping Cart" Button

REQ-1. The system shall allow a registered and logged-in user to remove any unwanted items from their shopping cart.

REQ-2. The system shall provide the user a way to select one of the items in his/ her cart for deletion.

REQ-3. After the user has indicated the particular item to be deleted from their shopping cart, the stored list representing the shopping cart should be updated by removing the list, and the display should be updated to show only the items remaining in the cart.

4.7. Purchase

The users can purchase items of their choice.

Stimulus: Click "Purchase" Button

REQ-1. The system shall allow a registered and logged-in user to purchase items that are in their shopping cart.

REQ-2. The system shall display the total cost of the items in the shopping cart.

REQ-3. The system shall allow the user to enter their delivery information.

REQ-4. After a successful transaction the user system shall prompt the user to enter their payment information.

REQ-5. On a successful transaction the items (titles and prices and quantities) will be displayed to the screen.

4.9 AddItem

The sellers can add items on the Sales Portal which are for sale.

Stimulus: Click "Add Item" Button

REQ-1. The system shall allow a registered and logged-in seller to add items they want to sell.

REQ- 2 The user shall be prompted to fill in a form with all details associated with the class 'Item' : Category of the item , Photo of the item, , price for selling, Age of the item(if not new), Name of the manufacturing company, city, and specific information about that product.

REQ-3. The system shall allow the user to enter their payment acceptance details like bank account number , IFSC Code etc.

4.11. Update Account Information

The users can update their account information on the sales portal so as to provide their most recent credentials.

Stimulus: Click "Update Account Information" Button

REQ-1. The system shall allow a user to update the information in their account.

REQ-2. The user shall be allowed to view and change their name, mailing address, billing address, payment information.

REQ-3. The user shall be able to change their password by entering the old one once, and a new one twice.

4.13.View Account Purchase History

The user can view the list of items purchased by them in the past. The purchase history shall also depict the date and cost of the past orders.

Stimulus: Click "View Account Purchase History" Button

REQ-1. The system shall allow a registered and logged-in user to view purchases made with their account within the last two years.

REQ-2. The system shall display the date of purchase.

REQ-3. The system shall display the details of each item purchased in a given order.

4.14. Account Logout

The user can log out of their account after use.

Stimulus: Click "Logout" Button

REQ-1. The system shall allow the registered and logged-in user to exit his/her account, so that access to operations requiring a user to be logged in are now disabled.

4.15. Manage buyers/sellers

Manager can see them and can delete their accounts incase of fraud.

Stimulus: Click "Manage buyers/sellers" Button

REQ-1. The system shall allow the registered and logged-in manager to delete buyers/sellers so that operations of them are now disabled.

4.16. Help negotiations

Managers can talk to buyer and seller to help bridge small gaps or to assist with delivery logistics.

Stimulus: Click "Help negotiations" Button

REQ-1. The system shall allow the registered and logged-in manager to chat with buyers/sellers to assist them.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

5.2 Safety Requirements

Any misleading or incorrect details regarding the items added to the portal will lead to a temporary or permanent ban of the customer responsible.

Once the item is purchased the order cannot be canceled/changed and a refund cannot be issued.

5.3 Security Requirements

Certain rules are made to set the password strong so that it cannot be guessed by the attacker. These rules include ensuring that the password contains a sufficient number of characters and contains not only lowercase letters but also capitals, numbers, and in some cases, symbols.

The system also uses third party payment API .Users will need to follow the security requirements as mentioned by the payment application.

5.4 Software Quality Attributes

The system is adaptable and can run on any web based platform. The software is very robust in the sense that the manager has the power to change the software from On-line sales portal to shopping portal like Flipkart and SnapDeal, just by removing all the sellers and selling branded products.The manager can add and remove item categories from the portal, which makes it flexible too.

5.5 Business Rules

The manager of the system can manage buyers and sellers of the system. If he finds somebody corrupt, that is, if someone is selling fake items (items that don't even exist), or someone is involved in a fake money transaction, the manager has the power to remove such customers from the system and block them permanently.

6. Other Requirements

Items sold by sellers should match industry standards.

Licensing requirements: Applicable

Legal, Copyright and Other notices: All rights reserved by our organization.

Appendix A: Glossary

SRS

A software requirements specification (SRS) is a comprehensive description of the intended purpose and environment for the software under development. The SRS fully describes what the software will do and how it will be expected to perform.

Server

A server is a computer or computer program which manages access to a centralized resource or service in a network.

UML

The Unified Modeling Language (UML) is a general-purpose, developmental, modeling language in the field of software engineering that is intended to provide a standard way to visualize the design of a system.

API

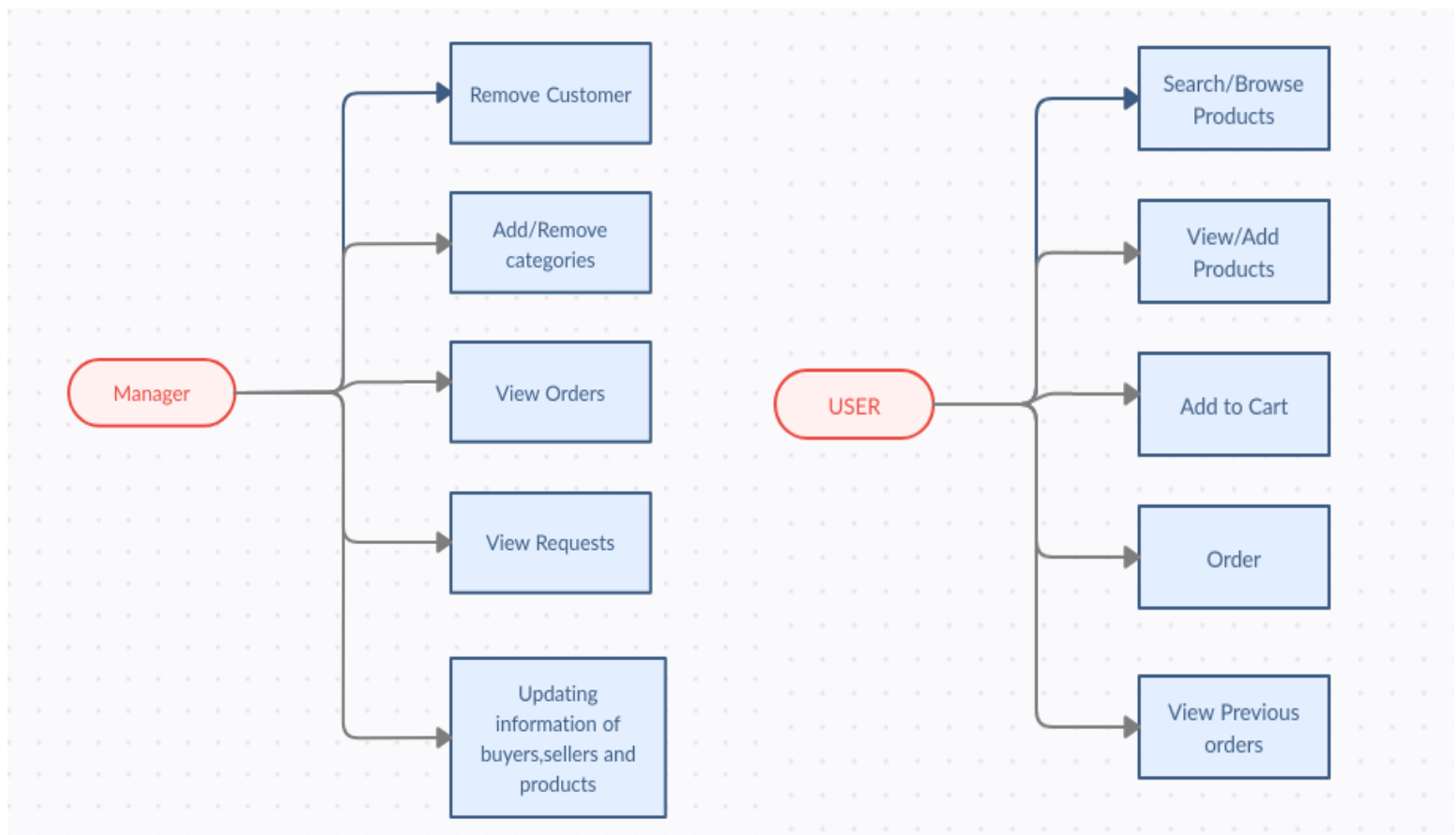
API is an acronym for Advanced Programming Interface. It is a set of functions and procedures allowing the creation of applications that access the features or data of an operating system, application, or other service.

HTTP

HTTP means HyperText Transfer Protocol. HTTP is the underlying protocol used by the World Wide Web and this protocol defines how messages are formatted and transmitted, and what actions Web servers and browsers should take in response to various commands.

Appendix B: Analysis Models

Data Flow Diagrams



UseCase Diagrams

