Software Design Document (SDD) Template

Software design is a process by which the software requirements are translated into a representation of software components, interfaces, and data necessary for the implementation phase. The SDD shows how the software system will be structured to satisfy the requirements. It is the primary reference for code development and, therefore, it must contain all the information required by a programmer to write code. The SDD is performed in two stages. The first is a preliminary design in which the overall system architecture and data architecture is defined. In the second stage, i.e. the detailed design stage, more detailed data structures are defined and algorithms are developed for the defined architecture.

This template is an annotated outline for a software design document adapted from the IEEE Recommended Practice for Software Design Descriptions. T he IEEE Recommended Practice for Software Design Descriptions have been reduced in order to simplify this assignment while still retaining the main components and providing a general idea of a project definition report. For your own information, please refer to IEEE Std 1016-1998[1] for the full IEEE Recommended Practice for Software Design Descriptions.

1 h tt p : / /www.cs.concordia.ca/- ormandj/comp354/2003/Project/ieee-SDD.pdf

Team No : 2

E-COMMERCE WEBSITE

Software Design Document

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Software Design Document

1. INTRODUCTION

1.1 Purpose

This software design document describes the architecture and system design of E-commerce Website system.E-commerce Website system is a perfect platform for buying and selling products to the users and consumers.This system is easy to use and full featured

1.2 Scope

This E-commerce Website system will allow the users to buy and sell products if he/she has credentials to log in.

Homepage : It is the default page for our website,in which users can shop products based on category.

Seller button : Users can sell products using these options.

Billing system : In this section,the product that the user bought will be displayed along with personal details.

1.3 Overview

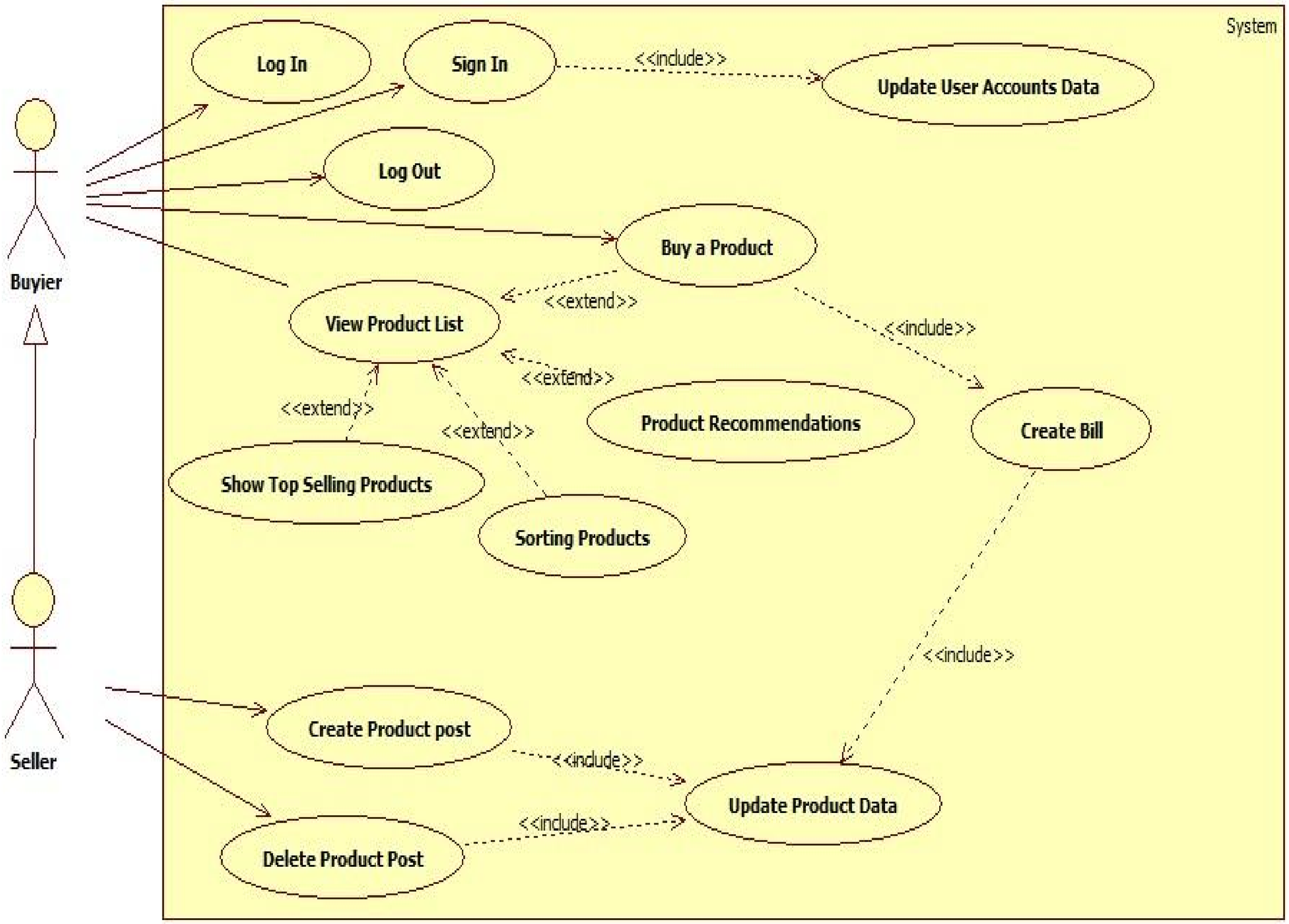
This document mainly focuses on overview of the system,Architectural design,Data design and various design of the component,Design of Interface, basic requirements.This system increases the mutual learning among the public.

2. SYSTEM OVERVIEW

This project represents an E-commerce Website system. The main aim of any E-commerce Website system is to sell and buy the product that interests the user. So, the user can easily get their hands on the content that they need. This system allows the users to search, view, buy and sell the product based on category. Here, the sellers are the ones who sell the product in this system. So, the system provides them the ability to create and delete products in favour for both seller as well as buyer.

3. SYSTEM ARCHITECTURE

3.1 Architectural Design



Actors :

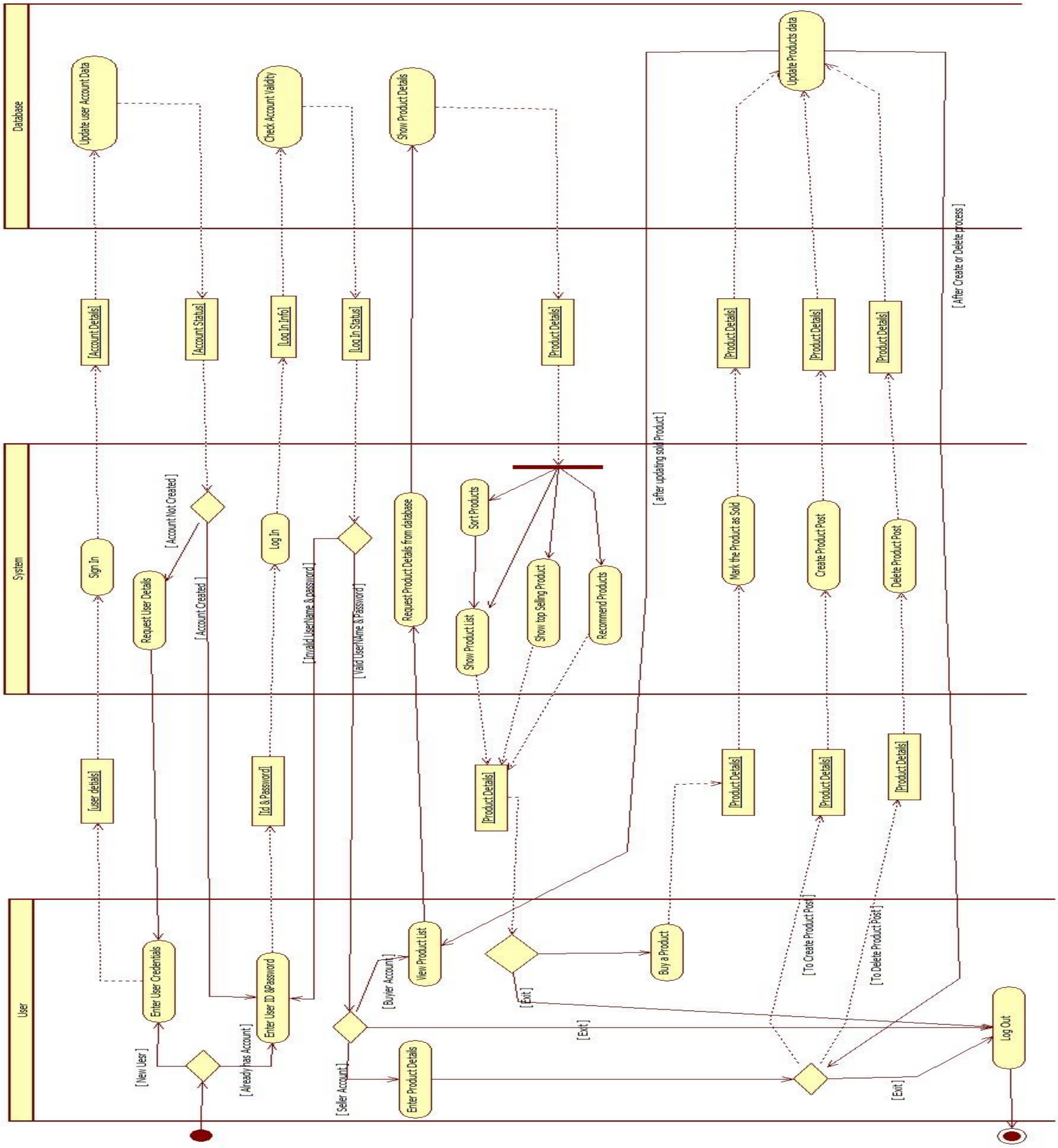
Buyer - Buyer is the end user who can create an account in the system and can visit the website to buy products.

Seller - Seller is also an end user, they are the super subset of buyer, but has special permission to create new products posts.

System Boundary :

This system boundary includes all the functions required for running the system/

3.2 Activity Diagram



3.3 Design Rationale

In this system, the webpages are actually provided by the backend (express). The modules are separated depending upon the different functionalities required by the system.

4. DATA DESIGN

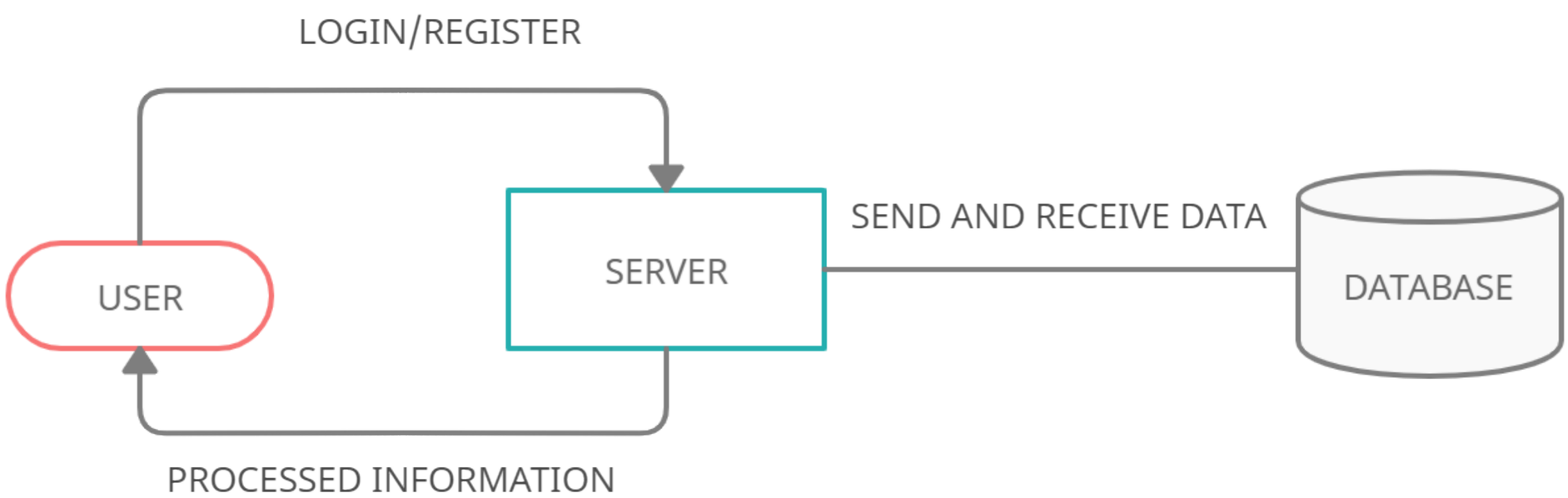
4.1 Data Description

The category of each product is saved in vector-like fashion. Similarly the interested categories of the users are processed as vectors for ease of matching.

The data is passed to the backend using API calls following REST architecture. And the resultant data will be object.

The data is stored in the postgres database, provided by heroku. It will be organised as a table of records..

Level 0:



Level 1 :

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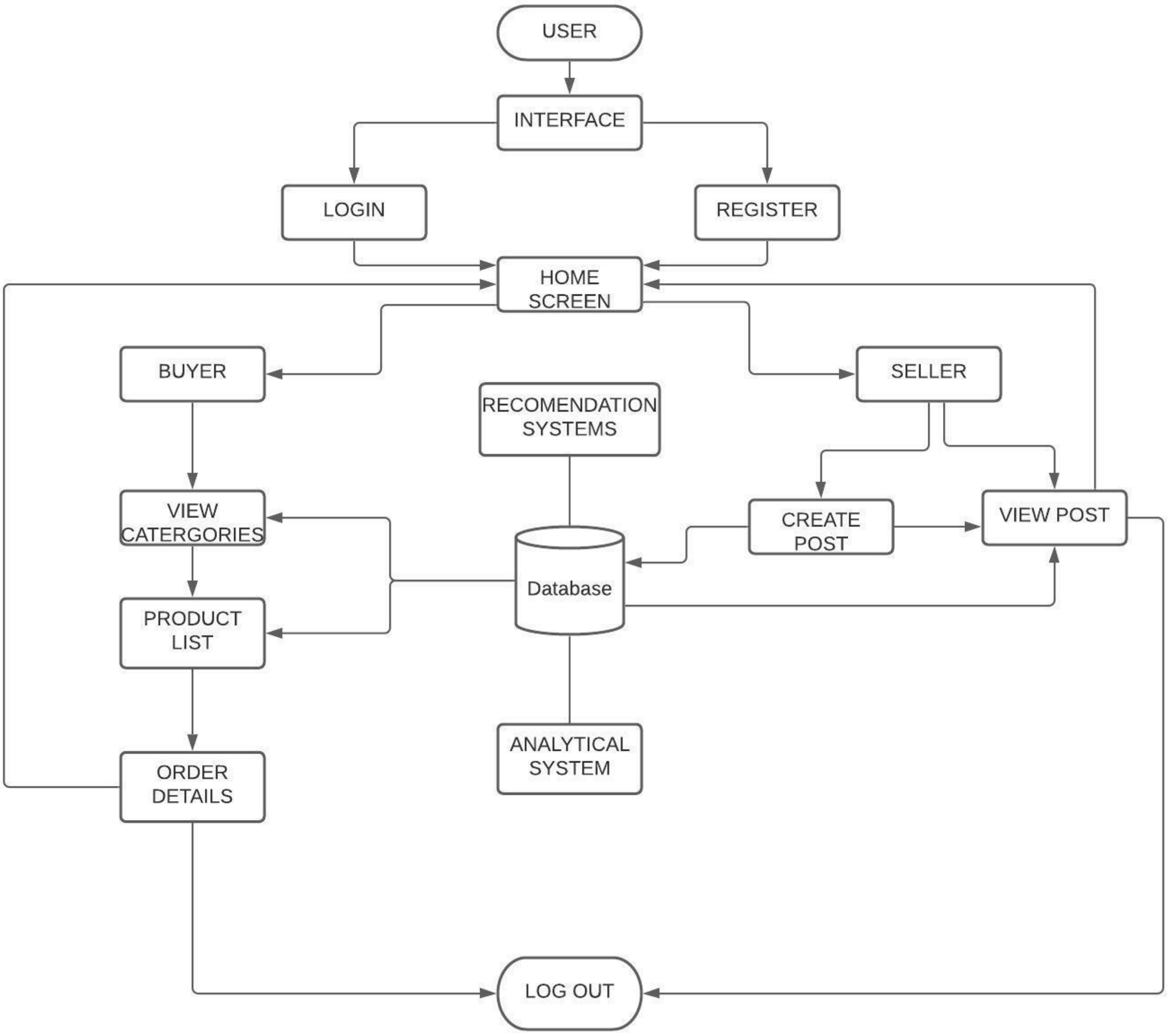


4.2 Data Dictionary

User

Description: The user entity is used to represent a user in the system.

Attributes: username, password, address,phone no.

Product log

Description: The product details and quantities store its details.

Attributes: product name,Quantity,Category,Price

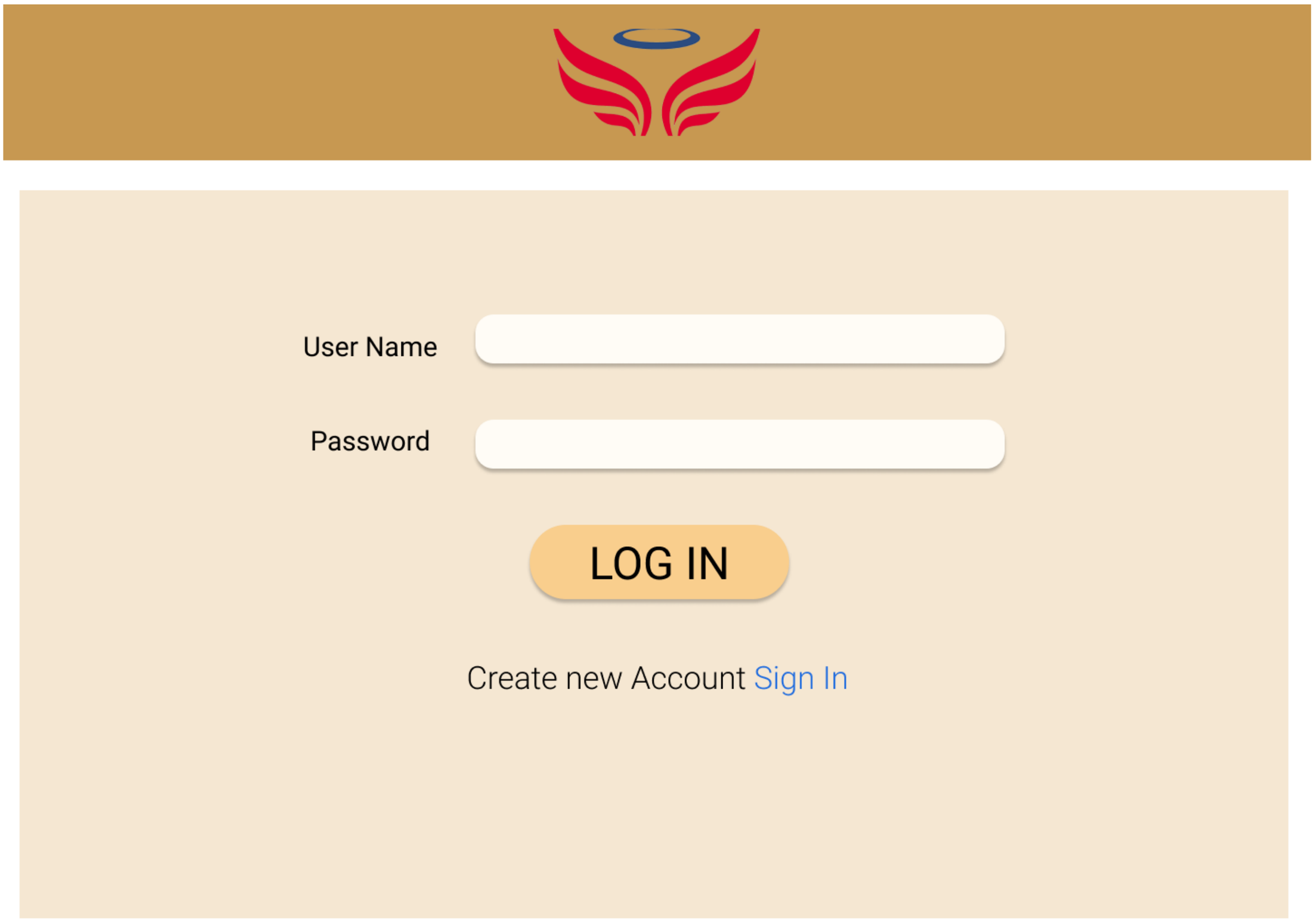
5. HUMAN INTERFACE DESIGN

5.1 Overview of User Interface

This System User Interface consists of seven pages such as Login page, Sign Up page, Home page, Category page, Order page, Seller home page, Create new post.

5.2 Screen Images

Log In Page:



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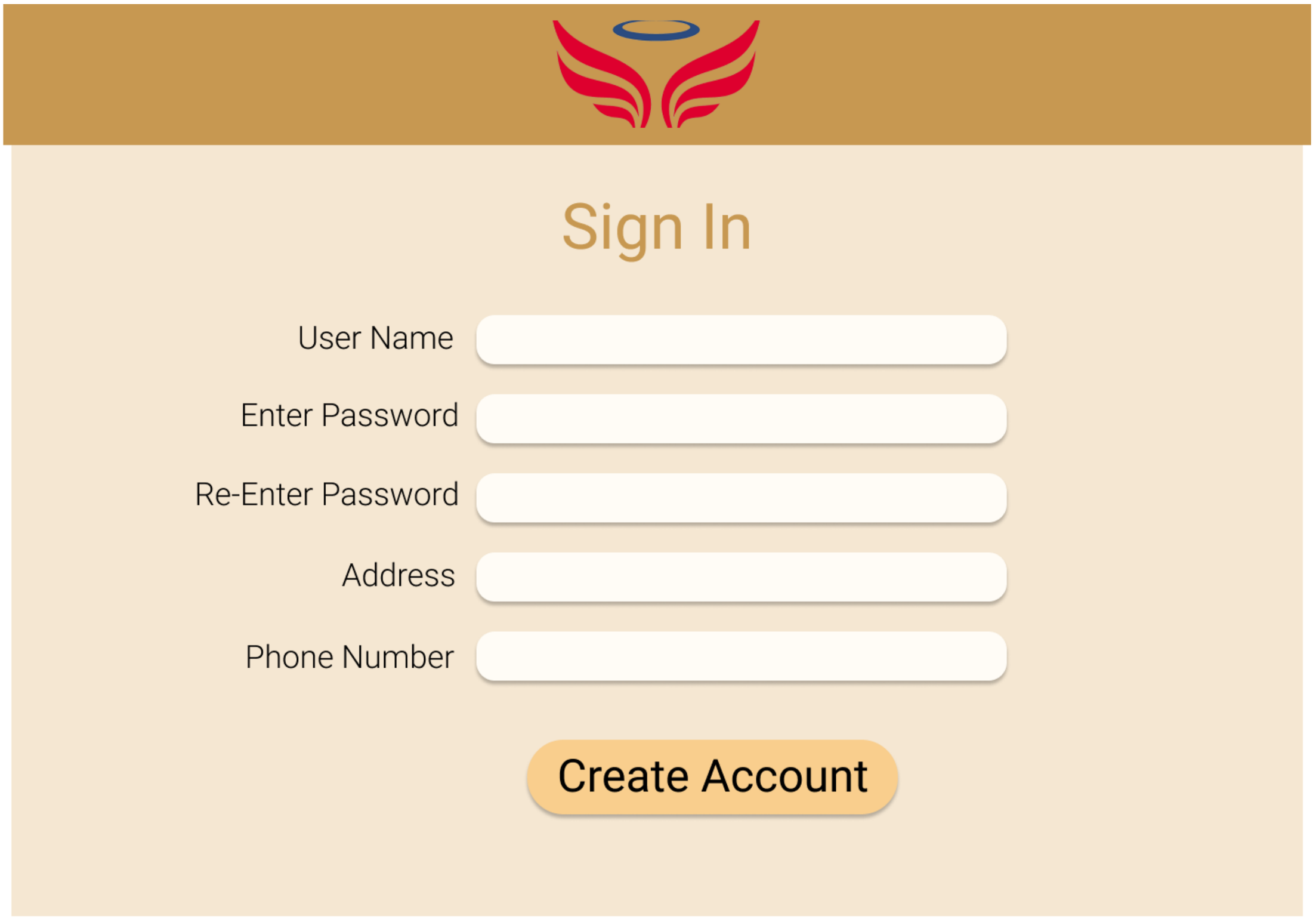
Sign Up Page:



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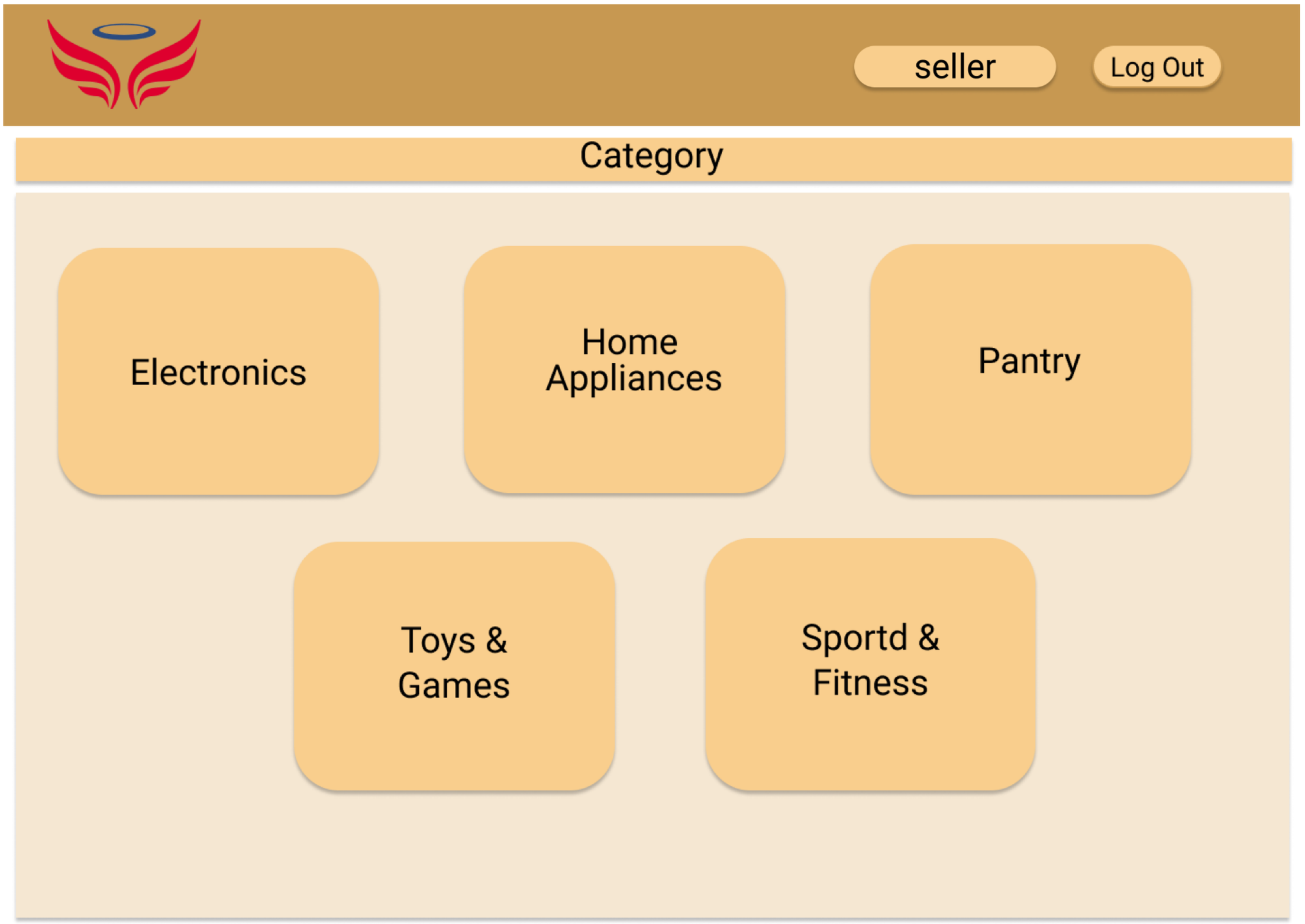
Hame Page :



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Category Page :

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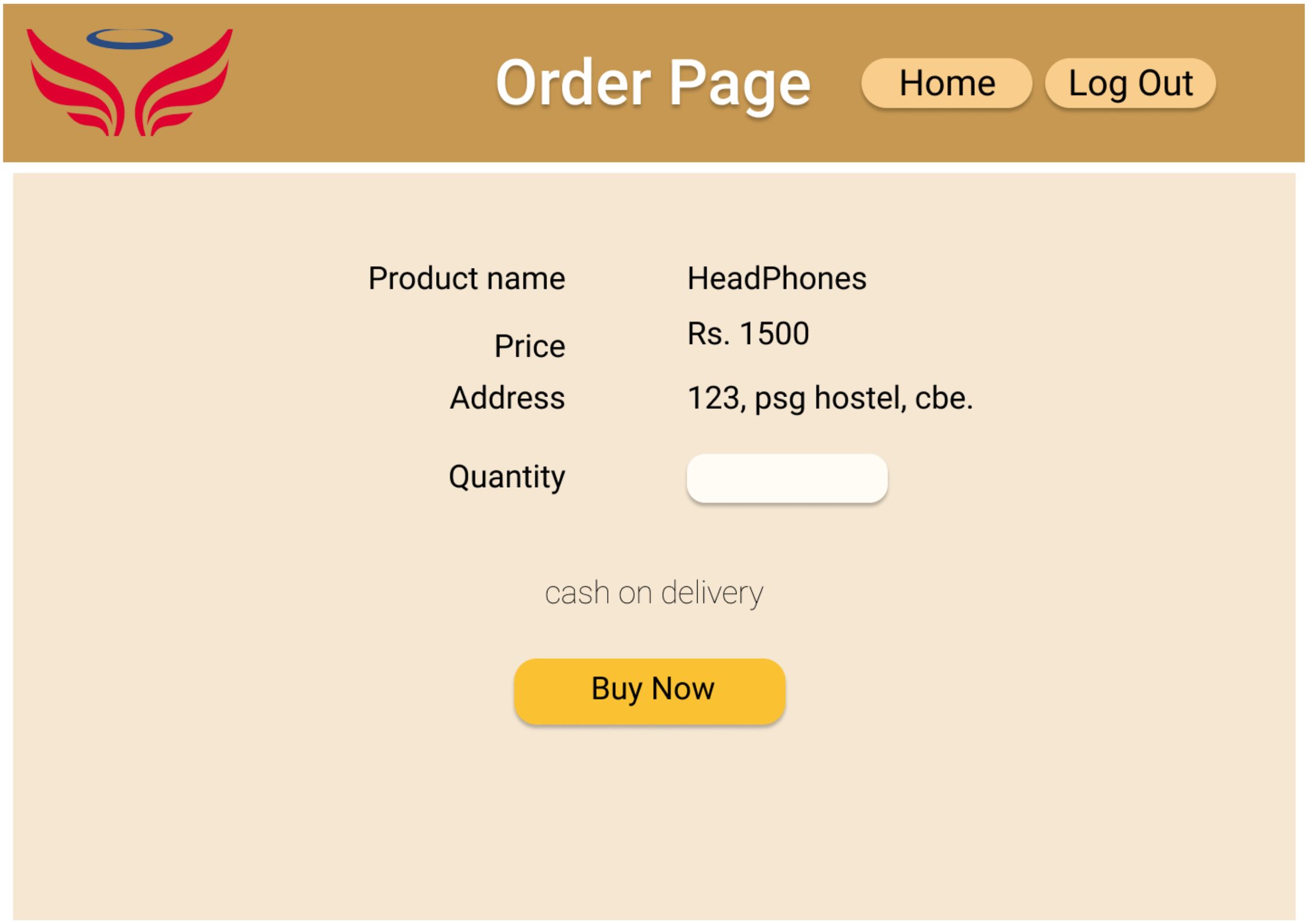
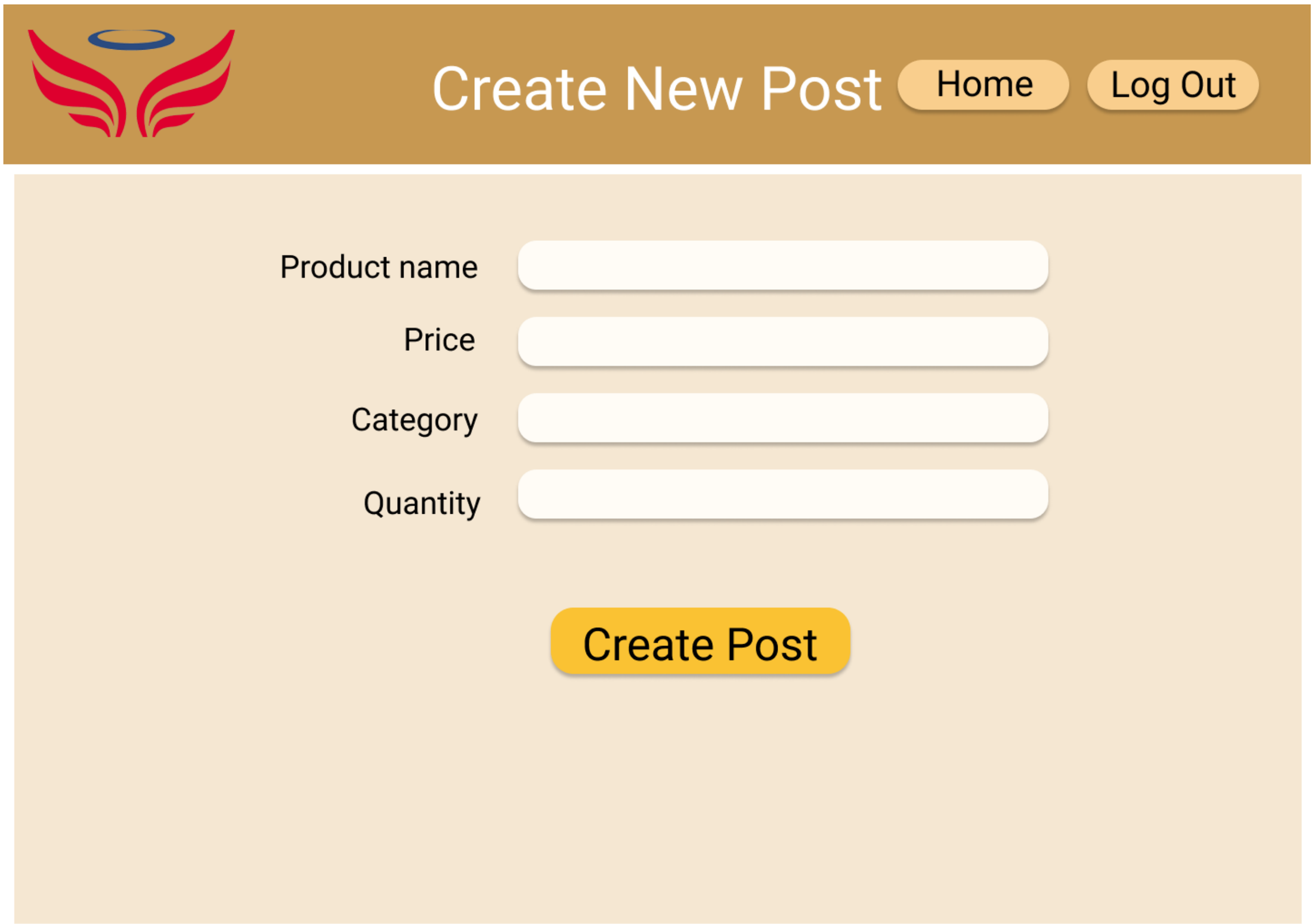
Order Page :



Seller Home Page :

Create New Post :



6. REQUIREMENTS MATRIX

Which system components satisfy each of the functional requirements from the SRS.

S No.	System Components	Functional requirements from SRS
1	recommended	Product recommendation
2	sort by price, sort by rating	Sorting Products