Phantom

Mini-Ebay
Software Requirements Specification
For Web Application

Version <1.0>

Mini-Ebay		Version:	1.0
Software Requirements Specification		Date: 01/Nov/22	
First Draft			

Revision History

Date	Version	Description	Author
01/Nov/22	1.0	First Version of Mini Ebay	Meng Wai Chan Sam Phillips Milan Thapa Sean Iori Cometa Umali

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Software Requirements Specification

1. Introduction

This design report will give a detailed description and design for our Mini Ebay system. It will explain the purpose of the system, scope, definitions, acronyms and abbreviations used in this document , references and an overview.

The system outlined here is a mini-ebay web application. The main purpose of this system is to allow users to buy and sell items between each other via auctions. This document will use use-case modeling to outline the project.

1.1. Purpose

This software is to create a mini-Ebay system allowing users to create listings for items they want to auction, by uploading photos of the item and creating a detailed description. The system will also allow other users to bid and purchase items listed on the system. Users are able to browse or search available items listed based on title, keywords, price range, and ratings.

The Mini-Ebay system will allow other users to rate and submit reviews of the the sellers and the items they have purchased, allowing other users to easily identify and make a decision based on the reviews and ratings.

The Mini-Ebay system will also try to distinguish the interest of users based on their prior search history, and provide results based on their interests.

1.2. Scope

The scope of the Mini-Ebay system is to provide bare-bones functionality so that users can create auctions and bid on them. Users should be able to view listings and report them if unauthenticated, and register for an account. Once authenticated they should be able to view listings, report them, and bid on them. They can also submit reviews for listings they have won, as well as increase or decrease their available funds on the website. There should also be logging of transactions so the administrators can request and view historical reports based on different criteria. The administrators should also be able to moderate listings and users, giving warnings and banning users if required.

1.3. Definitions, Acronyms, and Abbreviations

Terms	Definition
SU (Super User)	The administrator of the system
OU (Ordinary User)	The people registered for the system
GU (Guest User)	People who use the system but did not register
GUI (Graphical User Interface)	Allow users to interface with the system through graphical and visual components

Python	A dynamic, objected oriented, high-level programming language
MySQL	A Relational database management system.
Flask	A web framework written in Python to help design and build a complex web applications

1.4. References

IEEE. IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications.
IEEE Computer Society, 1998.

Spec_Sample.pdf, Software Requirements Specification
(http://www-cs.ccny.cuny.edu/~csjie/322/spec_sample.pdf)

1.5. Overview

The remaining sections of this document provide the specific use-cases the application should support and how they interact between each other. Section two, the Overall Description, describes the overall functionality of the application and the use-cases that it should support. Section three, Specific Requirements, describes how each use-case interacts with each other and any special features required for an individual use-case.

2.   Overall Description

The overall model and foundation of our Mini-Ebay system will be shown in detail with the help of Use-Case Model Diagram. The Use-Case Model Diagram will show the functionalities of our system and visualize how Users using this system will interact with it.

2.1.   Use-Case Model Survey

This Use-Case Diagram can provide a better understanding of the Mini-Ebay System, by using diagrams to visualize the functionalities of our system and how users are able to interact with it. Section 3.1 will have a more detailed explanation of all Use-Cases provided in the following diagram for the Mini-Ebay System.

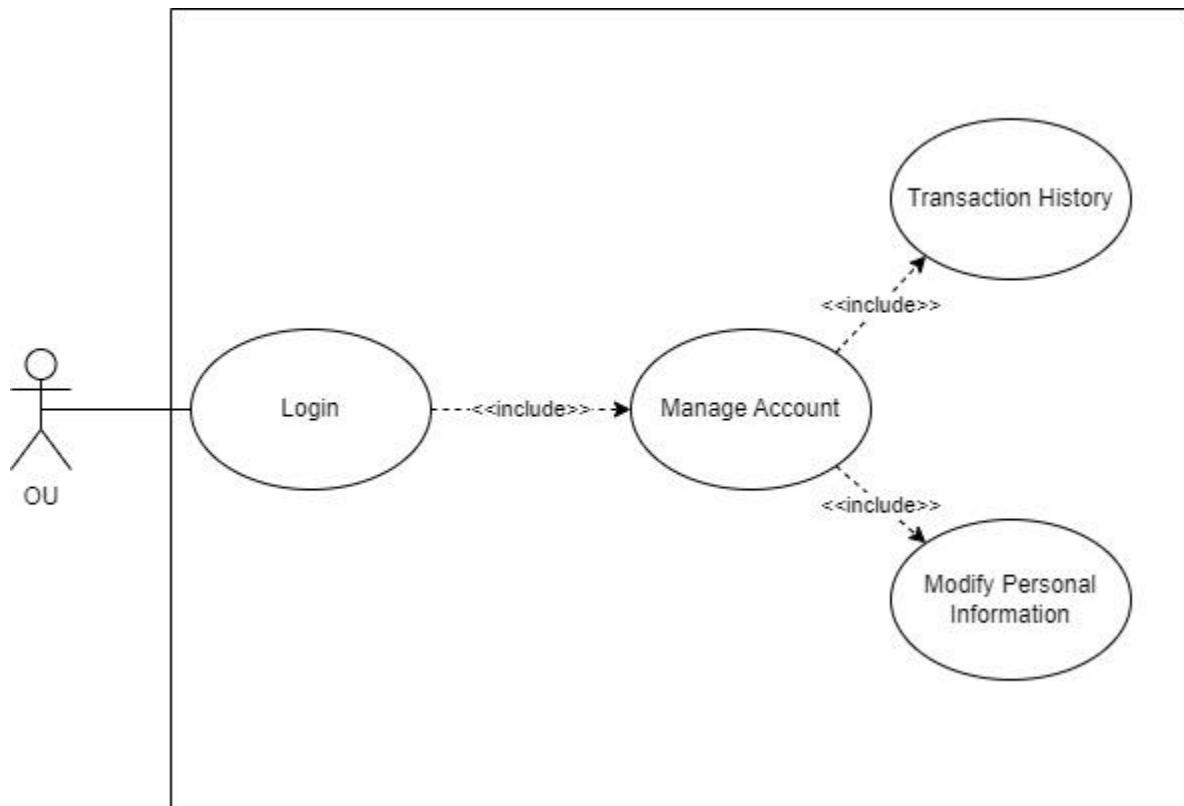## 2.2. Assumptions and Dependencies

- The currency used for bidding and transaction will be USD, any other form of currency will not be accepted.
- OU understands their rating will affect their relevance when other users are browsing for items, placing their item below everyone else.

3. Specific Requirements

This Section will provide a detailed explanation and analysis of the functionalities available in the Mini-Ebay System.

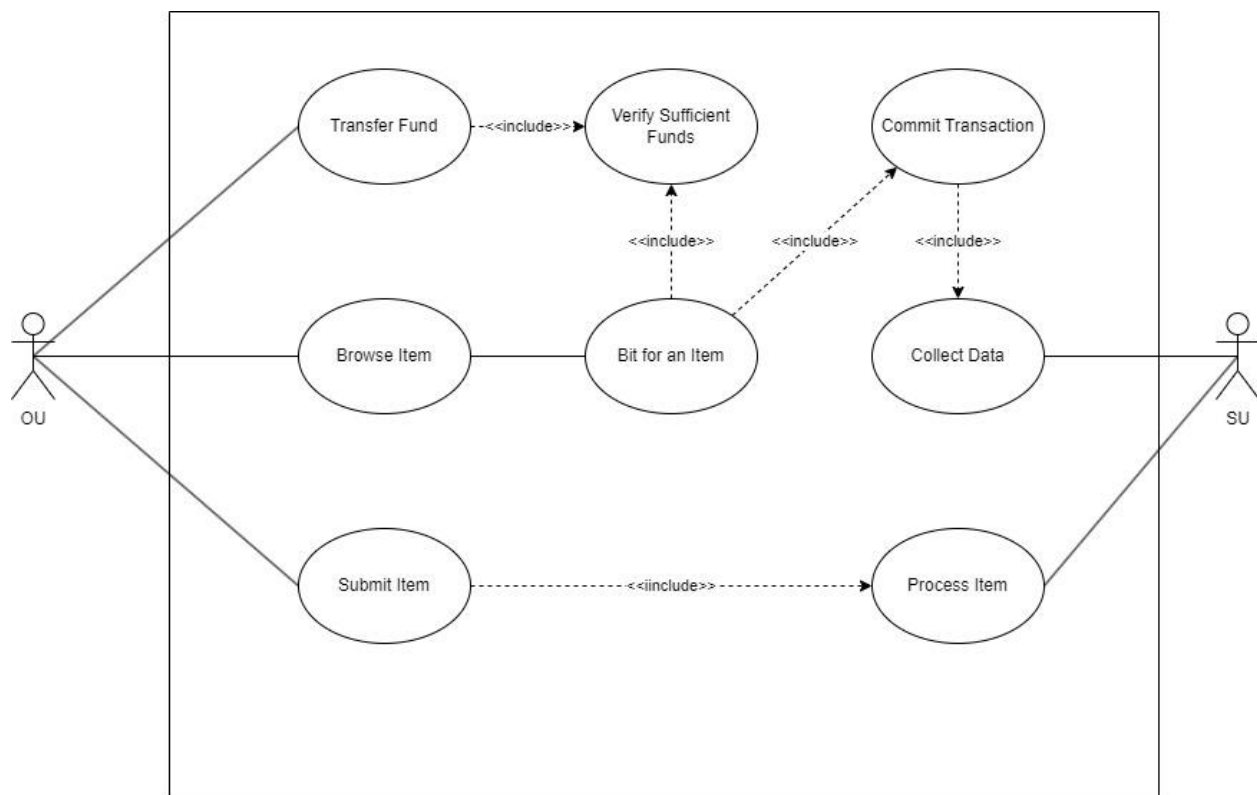## 3.1. Use-Case Reports

3.1.1. Use Case: Login

- Login
  - Login is provided for ordinary user and super user
  - User enters credentials and is logged into their account if the information provided was correct
- Manage Account
  - User can view information related to their account

- Modify Personal Information
  - User must already be login to modify information
  - User can modify information related to their account
    - Password
    - Name
    - Address
    - Phone
    - Credit Card number
- Transaction History
  - User can view their own transaction history

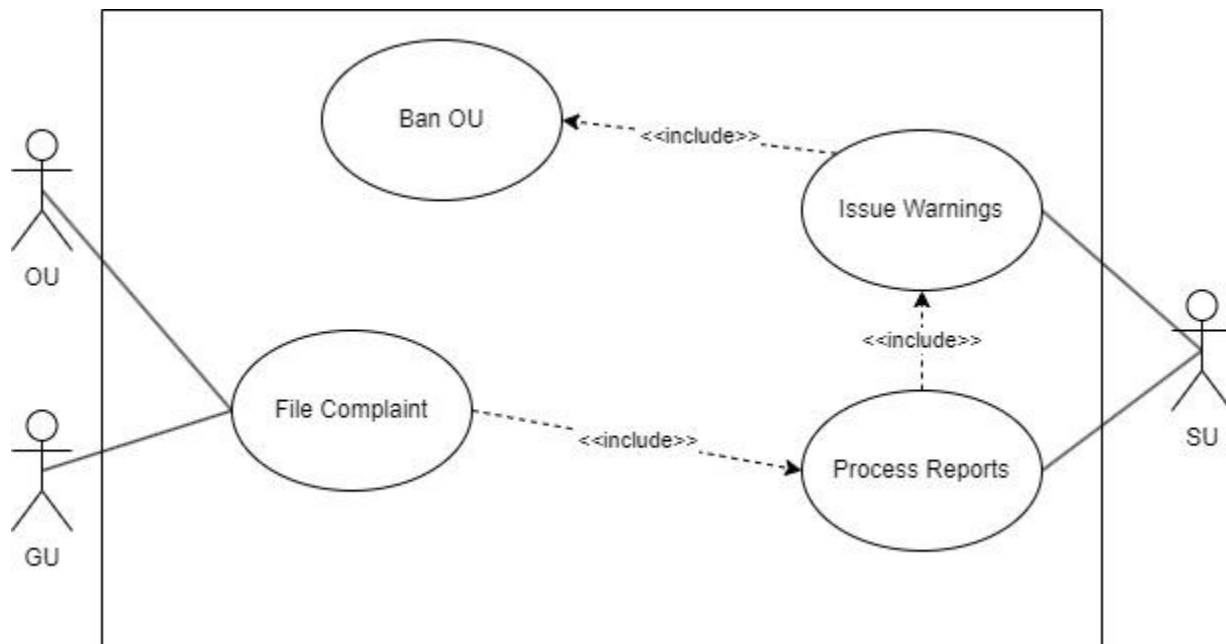**3.1.2.** Use Case: Browse/Bid Items

- Transfer Funds
  - User can deposit or withdraw funds between the system and their bank account
  - User can deposit funds by charging their credit card
- Verify Sufficient Funds
  - If withdrawing funds from the system, ensure the user has sufficient available funds
  - If submitting a bid for an item, ensure the user has sufficient available funds
- Bid for an Item
  - Once an item has been found, submit a bid for an item

- ○ requires sufficient funds available
- Commit Transaction
  - ○ When the listing for an item reaches its end time the transaction is finalized
  - ○ Show information within the transaction log
  - ○ Let the buyer submit a review for the item and seller
- Collect Data
  - ○ Query and receive statistics for transactions based on the filters applied
    - Can choose specific time periods and/or a specific user
- Submit Item
  - ○ Create a new item listing
    - Requires start/end time
    - Requires starting bid information
    - Requires at least one picture
- Process Item
  - ○ View pending listings and approve or deny them
- Browse Item
  - ○ Submit a query for specific items and view any relevant listings
- Submit Reviews
  - ○ Once a listing has been won, a user can create a review for that item and seller
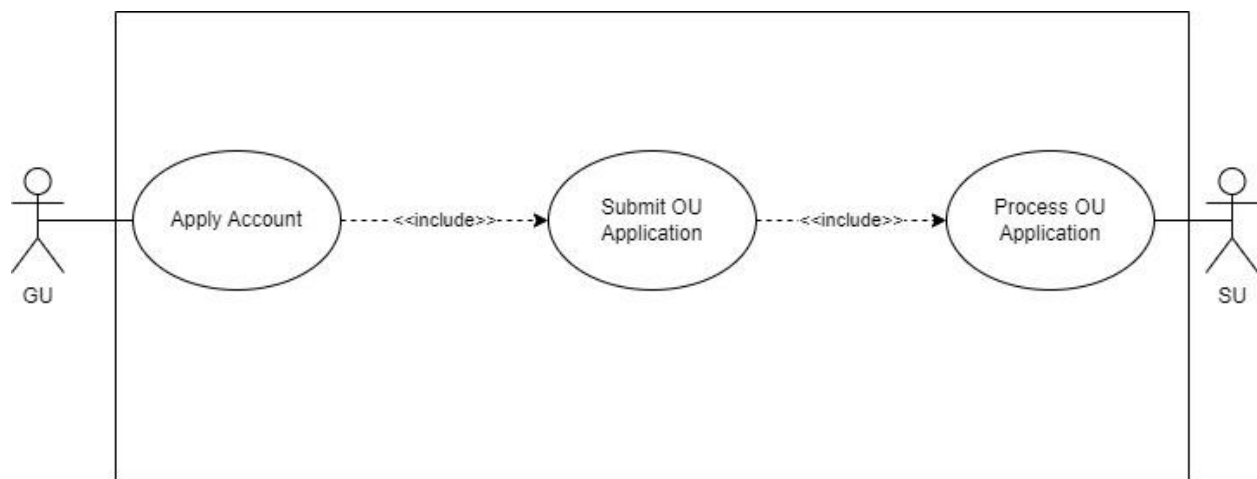
3.1.3. Use Case: Report System

- Issue Warnings
  - ○ Based on reports that a OU/GU has generated, issue warnings if applicable

○ Can also issue without an associated report
- Process Reports
  ○ View complaints filed and determine if warnings needs to be issued
- File Complaint
  ○ Submit a report to be reviewed by a SU
- Ban OU
  ○ Disable a specific OU from being able to buy or sell items if enough warnings has been issued

3.1.4.   Use Case: Apply For An Ordinary User Account

- Apply Account (Application to become an OU from a GU)
  ○ Submit OU Application
  ○ Send information required to apply for a OU account to be reviewed by a SU
  ○ Information is sent into a queue until a SU decides to process them
- Process OU Application
  ○ As a SU, view pending applications
  ○ Approve or reject pending OU applications
  ○ If Approved, account is created an GU is notified of their account
  ○ If Denied, GU is notified of the reason for the rejection

3.2.   Supplementary Requirements

To ensure the system can be Reliable and Usable, the lists below are requirements to meet for the longevity of the Mini-Ebay system.

3.2.1.   Reliability
- Configure automated backups and procedures to restore from backups
- Handle errors gracefully without crashing
- The system should be able to reconnect if it encounter disconnection

3.2.2.   Usability
- The application should be usable on both mobile and desktop browsers
- The application interface should be user friendly, the system should be usable for users that are computer literate.
- There should be adequate alt text to allow screen reader usage

4.   Supporting Information

This Software Requirements Specification Includes:

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