Product Requirements Document
Submission 1 Specification

Team 2
SWEN90007 SM2 2021 Project
Release Tag: SWEN90007_2022_Part1_Team_2

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Revision History

Date	Description	Author
10/08	Created document scaffolding	James Vinnicombe
10/08	Added draft of domain model	James Vinnicombe
10/08	Added use cases (without details) and got started on formatting	Sable Wang-Wills
11/08	Added domain model description and included domain model that was created as a team.	Sable Wang-Wills
12/08	Added descriptions for first eight use cases	James Hollingsworth
14/08	Add descriptions for the last eight use cases	Tom Woodruff
15/08	Formatting and minor additions	James Vinnicombe

Contents

1. Introduction

1.1 Proposal

This document specifies the SWEN90007 project use cases, actors to be implemented, and the system's domain model.

1.2 Target Users

This document is mainly intended for SWEN90007 students and the teaching team.

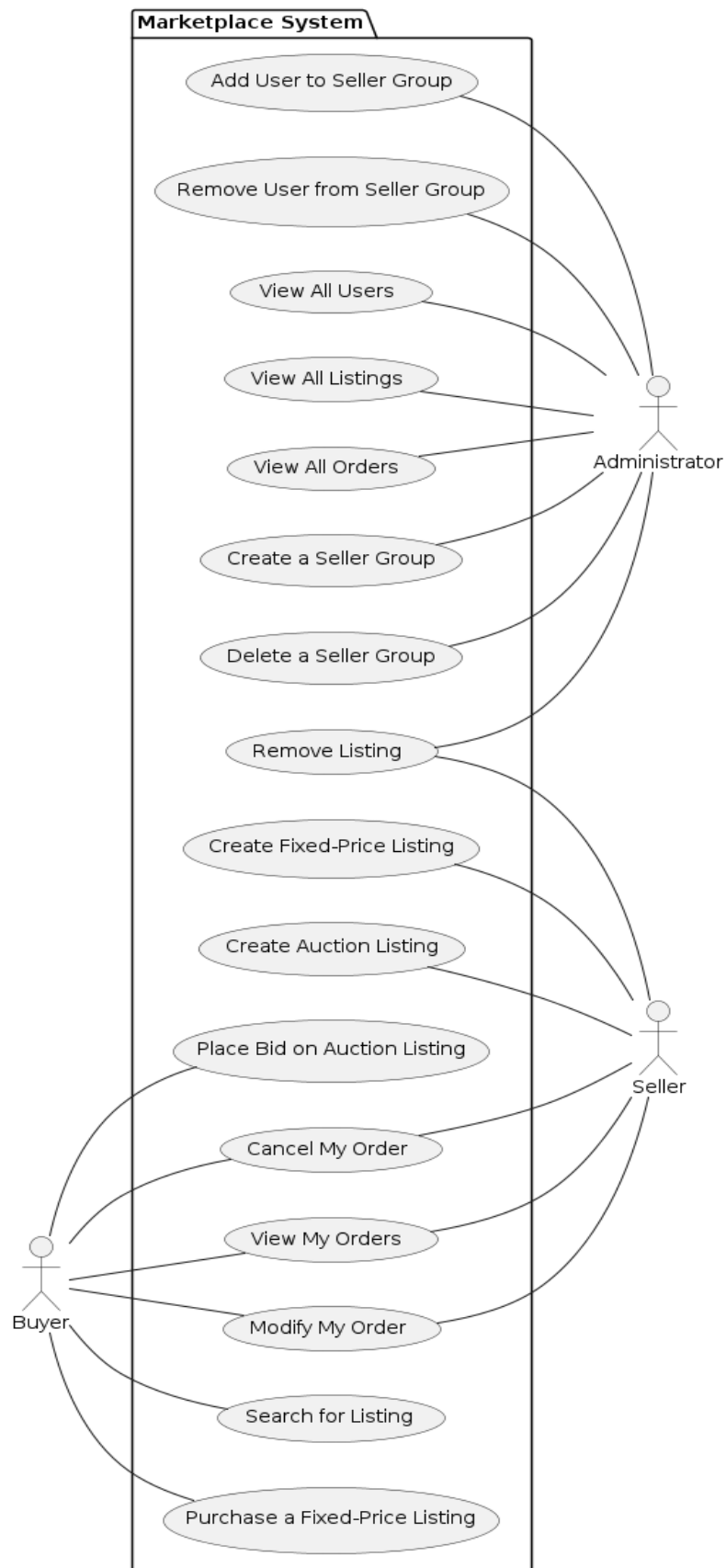## 1.3 Conventions, terms and abbreviations

This section explains the concept of some important terms that will be used throughout this document. These terms are detailed alphabetically in the following table.

Term	Description
Seller Group	A group of one or more users that are able to create listings to sell products.
Fixed-Price Listing	A listing where the price does not change and is sold on a first come, first served basis.
Auction Listing	A listing where the listing is sold to the buyer who makes the highest bid in a given time frame

2. Actors

Actor	Description
Admin	Administrators are responsible for managing the application. They can view most information to monitor the marketplace.
Seller	Sellers create listings of various types for sale.
Buyer	Buyers can view and purchase listings.

3. Use Cases

Marketplace System

- Add User to Seller Group
- Remove User from Seller Group
- View All Users
- View All Listings
- View All Orders
- Create a Seller Group
- Delete a Seller Group
- Remove Listing
- Create Fixed-Price Listing
- Create Auction Listing
- Place Bid on Auction Listing
- Cancel My Order
- View My Orders
- Modify My Order
- Search for Listing
- Purchase a Fixed-Price Listing

Actors: Administrator, Seller, Buyer

3.1   UC1: View All Users

Actors

- Admin

Basic Flow

The administrator logs into the Marketplace system to view the users within the system. After logging in they click "View All Users" in the administrator view. The list of all users is displayed showing usernames and other basic information in a tabular view, in alphabetical order by username. The administrator can then click on any user to see all information on the user account including but not limited to: Orders, Listings, Name, Bids, Seller Groups.

3.2   UC2: View All Listings

Actors

- Admin

Basic Flow

The administrator logs into the Marketplace system to view the listings within the system. After logging in they click "View All Listings" in the administrator view. The list of all listings is displayed showing listing ID and other basic information in a tabular view in chronological order of when the listing was created. The administrator can then click on any listing to see all information on the listing including but not limited to: Seller Group, Seller, Price, Listing Date, Listing type, Description. The administrator can then click through on Seller to see that user's information.

3.3   UC3: View All Orders

Actors

- Admin

Basic Flow

The administrator logs into the Marketplace system to view the orders within the system. After logging in they click "View All Orders" in the administrator view. The list of all orders is displayed showing order ID and other basic information in a tabular view in chronological order of when the order was created. The administrator can then click on any order to see all information on the order including but not limited to: Seller Group, Seller, Price, Order Date, Buyer, Description, Quantity. The administrator can then click through on Seller or Buyer to see that user's information.

3.4 UC4.1: Create a Seller Group

Actors

- Admin

Basic Flow

The administrator logs in with the intention to create a new seller group. The administrator clicks on the "Manage Seller Groups" button to navigate to the seller groups page. They click the "New Seller Group" button. They fill in the information required for the seller group including but not limited to: Name. The administrator then must select users to be added to the seller group. At least one user must be added to the seller group before the administrator can continue. When they have finished entering the required information they click the create button, this creates the seller group.

3.5 UC4.2: Delete a Seller Group

Actors

- Admin

Basic Flow

The administrator logs in with the intention to delete an existing seller group. The administrator clicks on the "Manage Seller Group" button to navigate to the seller group page. The current seller groups are displayed in a tabular view in alphabetical order by the Seller Group Name. The administor then clicks on the seller group they wish to remove, pulling up the full information page for the seller group. The administrator then clicks on the delete seller group button removing the seller group from the system.

3.6 UC5.1: Add User to Seller Group

Actors

- Admin

Basic Flow

The administrator logs in with the intention to add an existing user to an existing seller group. The admin clicks "View All Users" and a list of all users is displayed showing usernames and other basic information in a tabular view, in alphabetical order by username. The admin clicks on one user's information, and is shown their details. They then click "Add User to Seller Group" and a drop-down list of existing seller groups is shown. The admin selects one of these groups, adding the selected user to the selected group.

3.7 UC5.2: Remove User from Seller Group

Actors

- Admin

Basic Flow

The administrator logs in with the intention to remove an existing user from an existing seller group. The administrator clicks on the "Manage Seller Group" button to navigate to the seller group page. The current seller groups are displayed in a tabular view in alphabetical order by the Seller Group Name. The administor then clicks on a seller group and can view all sellers in that group. The admin clicks the "Remove Seller from Group" button next to one of the users, and that seller is removed from the selected group.

3.8 UC6.1: Create Fixed-Price Listing

Actors

- Seller

Basic Flow

A seller logs into the Marketplace system with the intention to post a new listing of an item they have to sell. If they are part of a seller group they will have access to a create listing button. The seller then clicks this button and a new listing form is displayed. The seller then must enter the information about the listing into free text boxes including: Description, Condition, Brand, Size, Type, Colour. The seller then selects "Fixed-Price Listing" and fills in the Price and Quantity boxes. Once the information has been completed the seller then clicks "Create"; this posts the Fixed-Price listing to the marketplace system for others to view.

3.9 UC6.2: Create Auction Listing

Actors

- Seller

Basic Flow

A seller logs into the Marketplace system with the intention to post a new listing of an item they have to sell. If they are part of a seller group they will have access to a "Create Listing" button. The seller then clicks this button and a new listing form is displayed. The seller then must enter the information about the listing into free text boxes including: Description, Condition, Brand, Size, Type, Colour. The seller then selects "Auction Listing" and fills in the "End Time" and "Initial Price" boxes. Once the information has been completed the seller then clicks "Create" this posts the Auction listing to the marketplace system for others to view.

3.10   UC7: Remove Listing

Actors

- Admin or Seller

Basic Flow

A seller logs into the Marketplace system with the intention to remove a listing they have created. The seller clicks on the "My Listings" button navigating them to a tabular view of listings they have created in chronological order of creation. If they click on one of these listings they will then be able to see the full details of this listing. They click on the "Remove Listing" button which deletes the listing from the system.

An administrator logs into the Marketplace system with the intention to remove a listing. The admin clicks the "View All Listings" button in the administrator view. The list of all listings is shown in chronological order of their creation. The administrator can click a listing to see all information for the listing. On that page the administrator then clicks the "Remove Listing" button deleting the listing from the system.

3.11   UC8: Search Listings

Actors

- Buyer

Basic Flow

The buyer logs into the Marketplace system to search listings within the system. After logging in they click "View All Listings" in the buyer view. On that page there are two separate text boxes into which the buyer can enter text. The first box is for searching listings associated with **names of listed goods**, and the second is for searching for listings associated with a given **seller name**. Both boxes are case-insensitive but otherwise use exact matching. After entering text and pressing enter, only listings which match the given search parameters are shown on the page. Searches can use none, both, or either search box individually by omitting text. On clicking the "Search" button, the buyer will be shown a list of all listings which match the given search parameters.

3.12   UC9: Purchase a Fixed-Price Listing

Actors

- Buyer

Basic Flow

Having found a listing, the buyer can see the listing type is fixed price. They can also see the available quantity for that listing. They enter a number equal to or lower than the number available. They click the button "Complete Purchase" and the listing is purchased at the displayed price.

3.13 UC10: Place Bid on Auction Listing

Actors

- Buyer

Basic Flow

Having found a listing, the buyer can see the listing type is for an auction. They can see the end-time and date of the auction, and the highest bid so far. In the available text box they enter a number higher than the current highest bid. They click the button "Place Bid" and a bid will be placed for that auction listing. If they refresh the page before anyone else bids again, the page will display the price of the bid they placed.

3.14 UC11: View My Orders

Actors

- Seller or Buyer

Basic Flow

A buyer logs into the Marketplace system to view their orders for purchased items. After logging in they click "View All Orders" in the buyer view. The list of all orders is displayed showing order ID and other basic information in a tabular view in chronological order of when the order was created. They can then click on any order to see all information on the order including but not limited to: Seller Group, Seller, Price, Order Date, Description, Quantity.

A seller logs into the Marketplace system to view the orders which have been placed for their listings. After logging in they click "View All Orders" in the seller view. The list of all orders is displayed showing order ID and other basic information in a tabular view in chronological order of when the order was created. They can then click on any order to see all information on the order including but not limited to: Seller Group, Price, Order Date, Description, Quantity.

3.15 UC12: Modify My Order

Actors

- Seller or Buyer

Basic Flow

A buyer logs into the Marketplace system to modify an order for purchased items. After logging in they click "View All Orders" in the buyer view. The list of all orders is displayed showing order ID and other basic information in a tabular view in chronological order of when the order was created. They click on a particular order to see more details for it. Of the details shown, they can edit any of; delivery address, mobile, email. This can be done by clicking on the relevant detail on the screen, changing the value, and pressing enter.

A seller logs into the Marketplace system to modify the orders which have been placed for their listings. After logging in they click "View All Orders" in the seller view. The list of all orders is displayed showing order ID and other basic information in a tabular view in chronological order of when the order was created. They click on a particular order to see more details for it. Of the details shown, they can edit any of; estimated delivery date. This can be done by clicking on the relevant detail on the screen, changing the value, and pressing enter.

3.16 UC13: Cancel My Order

Actors

- Seller or Buyer

Basic Flow

A buyer logs into the Marketplace system to cancel an order for purchased items. After logging in they click "View All Orders" in the buyer view. The list of all orders is displayed showing order ID and other basic information in a tabular view in chronological order of when the order was created. They can then click the "Cancel Order" button next to the relevant order and that order is cancelled.

A seller logs into the Marketplace system to cancel an order which was placed for one of their listings. After logging in they click "View All Orders" in the seller view. The list of all orders is displayed showing order ID and other basic information in a tabular view in chronological order of when the order was created. They can then click the "Cancel Order" button next to the relevant order and that order is cancelled.
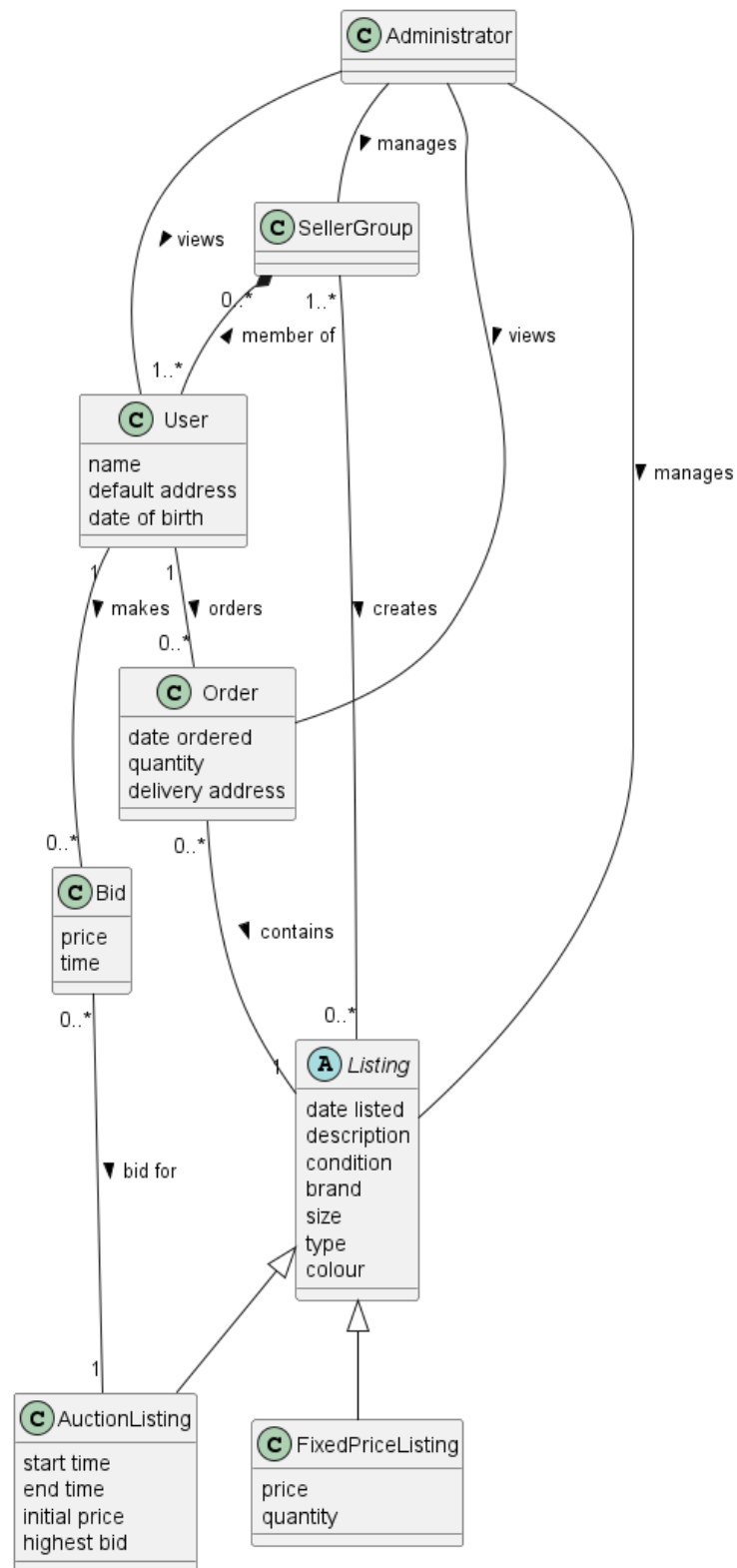
4. Domain Model

4.1 Domain Model Description

Based on the specifications provided for the Marketplace System, the system entities, attributes and business rules can be summarised as:

- **Administrators** can view **Users** and **Orders**, and manage **SellerGroups** and **Listings**;
- A **SellerGroup** is composed of *one or more* **Users**.
- A **SellerGroup** can create and manage *zero or more* **Listings**.
- A **Listing** can be either a **FixedPriceListing** or an **AuctionListing**.
- A **User** can be a member of *zero or more* **SellerGroups**.
- A **User** can place **Bids** on an **AuctionListing**.
- A **User** can make **Orders** for **Listings**.

Entities have been bolded; attributes have been underlined; and important *associations* have been italicised.

4.2 Domain Model Diagram

Appendix A – Checklist for Part1 Deliverable

Checklist must be submitted to Canvas by only one team member

Team name: Team 2
Repository name: tomcatbypass
Release tag: SWEN90007_2022_Part1_Team_2
URL to access your application: https://tomcatbypass.herokuapp.com/
Delivered:

✔	Use case diagram
✔	List of use cases
✔	Domain model diagram
✔	Domain model explanation/rationale

Additional comments (optional):