# Product Requirements Document
## Submission 1 Specification

**Team0**

SWEN90007 SM2 2021 Project

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## Revision History

| Date | Version | Description | Author |
|------|---------|-------------|--------|
| 06/08/2022 | 01.00D01 | Added some actors and use cases. | Andrew Liu |
| 14/08/2022 | 01.00D02 | Added use case scenarios | Wei Hong |
| 14/08/2022 | 01.00D03 | Added admin use case description and diagram and fixed some grammar errors | Sean Wong |
| 14/08/2022 | 01.00D04 | Added customer use case descriptions and customer to use case model. | Andrew Liu |
| 14/08/2022 | 01.00D05 | Added domain model diagram | Xi Zhao |
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# Contents

# Introduction

## 1.1    Proposal

This document specifies the use cases for an online marketplace, the actors to be implemented within it and the system's domain model.

## 1.2    Target Users

This document is mainly intended for the team working on developing the online marketplace. Where applicable, it can also be used by key stakeholders of the project, including the lecturer and markers.

## 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 sellers that manage listings together |
| Checkout Trolley | The list of items that are going to be ordered by a customer |
|  |  |
|  |  |

# 2.    Actors

| Actor | Description |
|---|---|
| Customer | An individual who purchases items listed on the website. |
| Seller | An individual who sells items on the website. |
| Administrator | An individual responsible for administering the website. |
|  |  |
|  |  |

## 3. Use Cases

### 3.1 Customer Creates an Account

**Actors**
Customer

**Basic Flow**
A customer arrives at the website. They begin the process of creating a new account. The customer enters their details into the relevant boxes. The account is successfully created and a confirmation message is shown.

### 3.2 Customer Searches for a Listing Using Listing Name

**Actors**
Customer

**Basic Flow**
A customer arrives at the website. They then enter the name of the listing to search for it. A list of listings with names matching the entered listing name is then displayed.

### 3.3 Customer Searches for a Listing Using Seller Name

**Actors**
Customer

**Basic Flow**
A customer arrives at the website. They then enter the seller's name to search for the seller's listings. A list of listing entries being sold by the seller is then displayed.

### 3.4 Customer Adds Item to Checkout Trolley

**Actors**
Customer

**Basic Flow**
A customer accesses the website to purchase an item. After finding the item they would like to purchase, they add the item to their shopping cart. The item is then stored in the shopping cart for later and the new cost of all the items in the shopping cart is displayed.

### 3.5 Customer Removes Item from Checkout Trolley

**Actors**
Customer

**Basic Flow**
A customer accesses the website. The customer then accesses their current shopping cart. They then remove an item from the shopping cart. The item is then no longer stored in the shopping cart. The new cost of all the items in the shopping is displayed.

### 3.6 Customer Changes the Quantity of an Item in Checkout Trolley

**Actors**
Customer

**Basic Flow**
A customer accesses the website. The customer then accesses their current shopping cart. They enter the amount of a particular item they would like to purchase in their shopping cart. The new cost of all the items in the shopping is then calculated and displayed.

### 3.7 Customer Bids for an Auction Listing

**Actors**
Customer

**Basic Flow**
A customer logs onto the website. After finding an auction listing they would like to bid on, they enter the amount they would like to bid. After the customer wins the auction, the item is automatically added to their cart. The customer then checks out their shopping cart in a limited amount of time.

### 3.8 Customer Checks Out Shopping Cart

**Actors**
Customer

**Basic Flow**
A customer logs onto the website. The customer then accesses their current shopping cart. They then checkout the shopping cart.

### 3.9 Customer View their Active Orders

**Actors**
Customer

**Basic Flow**
A customer enters their credentials and logs into their account. They then access their account details which display a list of their current active orders.

### 3.10 Customer Modifies an Active Order

**Actors**
Customer

**Basic Flow**
A customer enters their credentials and logs into their account. They then access their account details which display a list of their current active orders. The customer then selects the order they would like to modify. They enter the new amount of the item they would like to purchase. The order is then modified.

### 3.11 Customer Cancels an Order

**Actors**
Customer

**Basic Flow**
A customer enters in their credentials and logs into their account. They then search for an order they wish to cancel. After finding the order they wish to cancel, they then cancel the order. A confirmation message is then shown.

### 3.12 Seller Creates a Fixed Price Listing

**Actors**
Seller

**Basic Flow**
A seller logs into their account to create a listing for an item they wish to sell. After logging in, they begin the process to create the listing. They enter in the details of the item they wish to sell, along with the fixed price that they are selling it for. The seller is also able to set the owner of the listing to be either an individual or a seller group that the seller is affiliated with. Then, they finalise and publish the listing.

### 3.13 Seller Cancels an Order

**Actors**
Seller

**Basic Flow**
A seller enters in their credentials and logs into their account. They then search for an order they wish to cancel. After finding the order they wish to cancel, they cancel the order. A confirmation message is then shown.

### 3.14 Seller Creates an Auction Listing

**Actors**
Seller

**Basic Flow**
A seller logs into their account to create a listing for an item that they wish to sell. After logging in, they begin the process to create a listing. They select on the auction option, enter the reserve price and auction date.The seller is also able to set the owner of the listing to be either individual or a seller group that the seller is affiliated to. They finalise the details and publish the auction listing

### 3.15 Seller Creates a Seller Group

**Actors**
Seller

**Basic Flow**
A seller logs into their account to create a seller group for their organisation. The seller enters the name of the seller group, as well as sends invites to sellers that need to be added to the seller group

### 3.16    Seller Invites Multiple Sellers into the Seller Group

**Actors**
Seller

**Basic Flow**
A seller logs into their account and accesses the seller group panel. The seller clicks on the invite button which gives the option to invite other sellers on the platform into the seller group

### 3.17    Seller Accepts Invites into a Seller Group

**Actors**
Seller

**Basic Flow**
A seller logs into their account. They will be made aware of the invitation from another seller either via notifications or a invites page. The seller can choose to accept or decline the invite. Once the seller accepts the invitation, the seller will gain access to the seller group information

### 3.18    Seller Views All Active Orders

**Actors**
Seller

**Basic Flow**
A seller logs into their account and clicks on the active order tab. The seller will see a list of active orders that the seller is selling, along with active orders that are being sold under his selling groups. The owner of the listing (the seller || selling group) will be displayed within each active order listing

### 3.19    Seller Modifies the Quantity of a Selected Order

**Actors**
Seller

**Basic Flow**
A seller logs onto their account and clicks on the active order tab. The seller selects a listing within the list of active orders. The seller should be able to change the quantity of the order. The price of the order will be updated accordingly.

### 3.20    Seller Creates a Seller Account

**Actors**
Seller

**Basic Flow**
A potential seller can register a seller account using a valid email. A confirmation email will be sent to the seller's email. The seller is able to access his newly-created account after the email address is verified.

### 3.21 Administrator Removes an Inappropriate Listing

**Actors**
Administrator

**Basic Flow**
The administrator logs into their account. They then view all current listings for items. Upon spotting an inappropriate listing, the administrator removes the inappropriate listing.

### 3.22 Administrator Views All Users of the System

**Actors**
Administrator

**Basic Flow**
The administrator logs into their account and clicks on view all users from the admin dashboard. The administrator will see a list of all users of the system.

### 3.23 Administrator Views All Good Listed in the Application

**Actors**
Administrator

**Basic Flow**
The administrator logs into their account and clicks on view all listings from the admin dashboard. A list of all active listings will be shown.

### 3.24 Administrator Views Customer's Order History

**Actors**
Administrator

**Basic Flow**
The administrator logs into their account and clicks on view all users from the admin dashboard. The administrator will see a list of all users of the system and click on a customer's profile. A list of the customer's past orders is shown.

### 3.25 Administrator Updates Listing Details

**Actors**
Administrator

**Basic Flow**
The administrator logs into their account and views all current listings on the system. The administrator then clicks on a listing to view its main page. the administrator clicks the edit button to update the title of the listing.

### 3.26 Administrator Closes an Active Order

**Actors**

Administrator

**Basic Flow**

The administrator logs into their account. They then view all active orders in the system. The administrator views a specific order and then closes it.
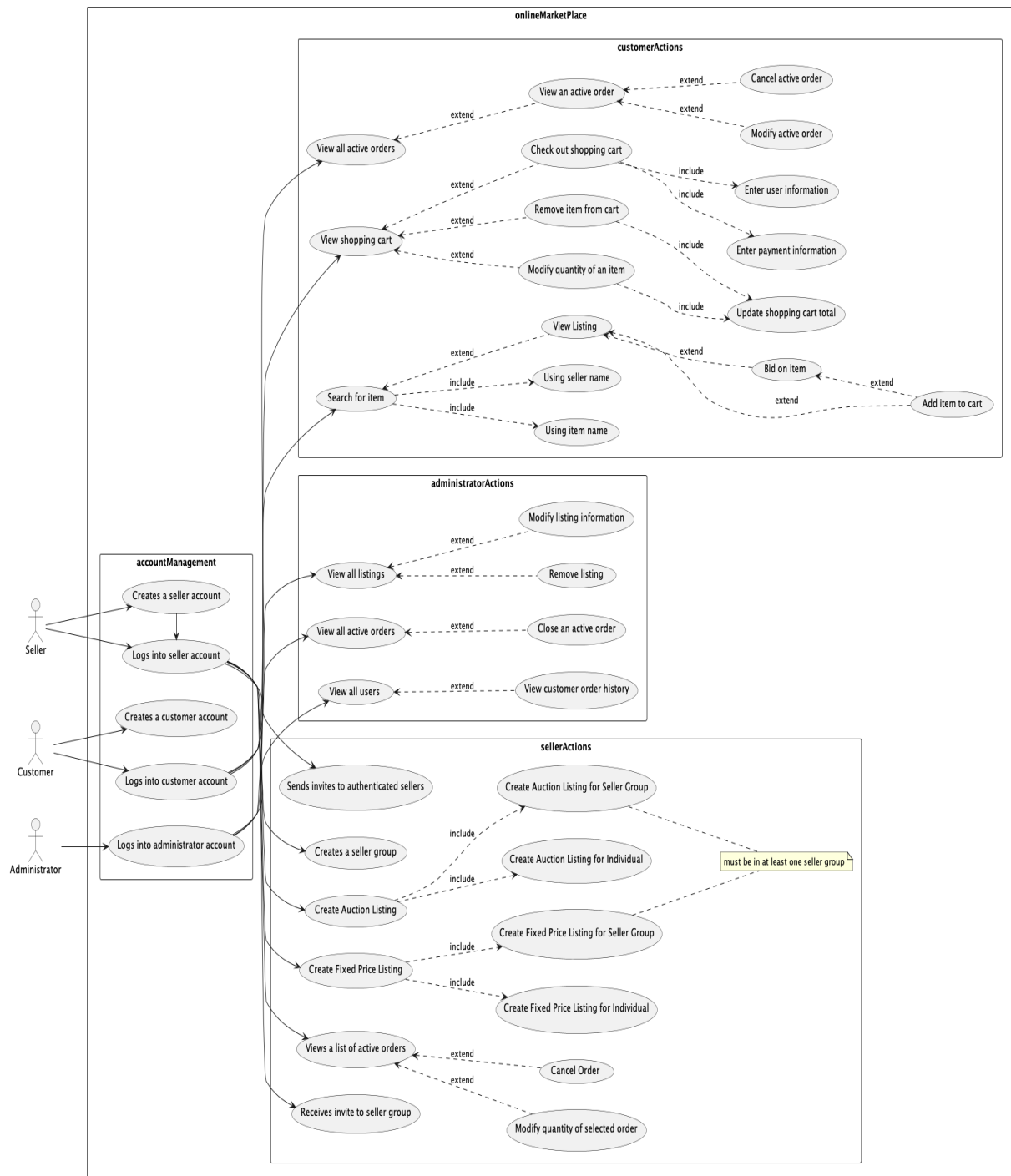
### 3.27 Administrator Views All Active Order

**Actors**

Administrator

**Basic Flow**

The administrator logs into their account. The administrator views all active orders in the system.

# Use Cases Diagram

# 4. Domain Model

## 4.1 Domain Model Description

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

- Users can be either **Administrator**, **Seller** or **Customer**;
- Orders can either be active or closed;
- Only sellers and seller groups can create a **listing;**
- Only the sellers and customers can modify the order;
- One or more Sellers can create a listing;
- One or more Sellers can receive one or more invites to seller groups;
- Listings can either be Fixed price or Auction-based;
- One or more Customers can view a listing;
- One or more seller can create a **seller group;**
- One or more seller can be part of zero or more seller group;
- One or more users in a seller group can send invites to one or more users who are not in the seller group;
- One or more customers can submit one or more orders for a listing;
- One or more active orders can be created from one listing;
- Admin can change one active order to one completed order;
- Admin can view the **site-wide purchase history;**
- Admin can modify one or more active orders;
- Admin can view one or more listing;
- Admin can remove one or more listing;
- One user can only view one **user purchase history** that belongs to the user;
- User purchase history are either **active orders** or **closed orders;**
- The site-wide purchase history is part of one or more user purchase history;
- A canceled order is a closed order;

**Entities** have been bolded; <u>attributes</u> have been underlined; and important *associations* have been italicized.

## 4.2   Domain Model Diagram

**See Diagram in the next page**

SCHOOL OF
COMPUTING &
INFORMATION
SYSTEMS

THE UNIVERSITY OF
MELBOURNE

**RoleType**
ADMIN
SELLER
CUSTOMER

1

enrolled as

*

**User**
id
name
email

view

1

**SellerGroup**
id
name
email

part of

**ListingType**
FIXED_PRICE
AUCTION

view / search

modify

view

modify

create

create as

**Listing**
id
name
quantity
category
price

**Auction**
id
name
starttime
endtime
reserve_price

purchase

**CheckoutDetails**
id
name
email
address

**OrderStatus**
ACTIVE
CLOSED

details given

create as

**Order**
id
name
quantity
price

update

**PurchaseHistory**
id
name
quantity
date

view

query

part of

**SitewidePurchaseHistory**
id
name
quantity
date