Buy	On]	Dem	and
-----	-----	-----	-----

Electronic Trading System Software Requirements Specification For online Mini-eBay

Version <1.0>

Buy OnDemand	Version: 1.0
Software Requirements Specification	Date: 1 / Nov / 22
First Draft	

Revision History

Date	Version	Description	Author
24 / Oct / 22	1.0	Purpose, overview	Emily
24 / Oct / 22	1.0	Scope, definitions, acronyms, abbreviations	Lily
24 / Oct / 22	1.0	References, overview	Alice
26 / Oct / 22	1.0	Use case model survey, assumptions, and dependencies, use case diagram	Emily
26 / Oct / 22	1.0	Supplementary requirements, supporting information, use case diagram	Lily
26 / Oct / 22	1.0	Use case model survey, use case reports, use case diagram	Alice
28 / Oct / 22	1.0	Final touches, revisions	Emily, Lily, Alice

Buy OnDemand	Version: 1.0
Software Requirements Specification	Date: 1 / Nov / 22
First Draft	

Table of Contents

1.	1. Introduction		4
	1.1	Purpose	4
	1.2	Scope	4
	1.3	Definitions, Acronyms, and Abbreviations	4
	1.4	References	5
	1.5	Overview	5
2. Overall Description		5	
	2.1	Use-Case Model Survey	5
	2.2	Assumptions and Dependencies	8
3.	Spec	rific Requirements	8
	3.1	Use-Case Reports	8
	3.2	Supplementary Requirements	11
4.	11 , 1		

Buy OnDemand	Version: 1.0
Software Requirements Specification	Date: 1 / Nov / 22
First Draft	

Software Requirements Specification

1. Introduction

1.1 Purpose

The purpose of this document is to give a comprehensive overview of an online electronic trading system (Buy OnDemand), including all its features, such as buying, selling, placing bids, and filing complaints. This report will clarify the project's development concepts and provide a general description of the project. The project's use-case model and report, assumptions and dependencies, system requirements and specifications, and any supplementary requirements that were made and used throughout the entire project are also included in this report. This paper will allow a better understanding of the development process we used for this program and its use and design of it.

1.2 Scope

The software will be an online electronic trading that can be visited by guests, ordinary users (registered buyers and sellers), and admins. The system will be structured to provide users with an intuitive way to sell or buy items. Some features that will provide our customers are the homepage with suggested items and, the search bar to search for specific items and user profiles for all members which allow users to keep track of their activity. The system has accountability for buyers, and sellers as the buyer may file a complaint about the seller's item that has caused a problem and vice versa sellers can grade a buyer. This system also implements a warning system with consequences for misbehavior from the admin's perspective of complaints and grading. Within our application, there are a variety of users, so each group will have its unique user experience and the functionalities for different users can be seen in the use case model survey.

1.3 Definitions, Acronyms, and Abbreviations

Terms	Definitions	
Django	Django is a high-level Python web framework that enables the rapid development of secure and maintainable websites.	
Python	Python is a high-level, general-purpose programming language.	
Guest Users	Regular user, not an ordinary user. They did not register an account with Buy OnDemand. Limited to interacting with the system. Only limited to searching available items and not buying or selling items.	
Ordinary Users Standard system users. Users who registered their account can buy or sell item		
Super Users	Non-customer related users such as the admin.	

Buy OnDemand	Version: 1.0
Software Requirements Specification	Date: 1 / Nov / 22
First Draft	

1.4 References

- Django. (n.d.). Djangoproject Documentation. Retrieved from https://docs.djangoproject.com/en/4.1/
- 2. IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998.
- 3. Postgresql. (n.d.). Postgresql Documentation. Retrieved from https://www.postgresql.org/docs/

1.5 Overview

The following sections of the documentation go through the use-case and capabilities of the software as a whole. The section titled "Overall Description" contains the use-case model survey, which is made up of concise descriptions of all use cases and individuals as well as essential diagrams and connections. As well as, any related dependencies and assumptions this system will be utilizing to ensure the software's viability. The "Specific Requirements" section explains the use-case reports and any additional functional and non-functional requirements.

2. Overall Description

2.1 Use-Case Model Survey

Users	Role	
Guest Users	Anyone who is visiting the website and is not registered in the system.	
Ordinary Users	An ordinary user is a user who has registered to create an account with their name and email.	
Buyer	This is an ordinary <i>user</i> who decides to buy items.	
Seller	This is an ordinary <i>user</i> who decides to sell items.	
Admin	This is a higher-level employee (super user) who decides on who can be buyers or sellers, processes items to sell, send warnings, settle disputes, and collect transaction statistics.	

Buy OnDemand	Version: 1.0
Software Requirements Specification	Date: 1 / Nov / 22
First Draft	

Homepage:

Company Logo: This feature is accessible throughout the whole experience of the website (minus the login/sign up page). It serves as a "homepage" button.

Search Bar: This is a feature that is accessible to anyone visiting the page. They can search for available items in Buy OnDemand. These searches will show up on the homepage.

Highest Rated Items: This is a feature that will show the top 3 top items on the homepage to the customer. The customer can click on each individual item for more information about it.

Regular Items: This is a feature that will show the regular items on the homepage to the customer.

Specific Item Page:

Item Photo: This is a feature that will show the specific items photo. The photo should be the same as what we see when we're browsing through the website.

Rating Bar: This is a feature that will show the average rating from previous buyers

Description: Provides the description of the product, pricing, and quantity per price.

"Add to Cart" Button: This is a feature that will allow the buyer to place the item and quantity number desired into the cart. A special case is if a guest user tries to add an item to the cart. In which case, an error message will occur, indicating to the user to sign up or log in.

Bidding: Allows buyers to bid on an item. This will display the current status of the bid. Initially it's the starting price. Once a buyer places a bid, the value will be replaced. Every bid has a time limit.

Login Page:

Register: This feature function is to give guest users the opportunity to become ordinary users. This page allows guests to use their name, email, and password to create an account. As well as, to allow guests to pick whether they want to register as a buyer or seller. The normal use case for this register page is to allow guests to use their name, email, password, and their choice in being a buyer or seller, to be able to create an account that will be recognized as an ordinary user. There are two special cases: one is where the ordinary user tries to register with the same email address, and two is when a removed user tries to register for another account when they have been removed from the system.

Buy OnDemand	Version: 1.0
Software Requirements Specification	Date: 1 / Nov / 22
First Draft	

Login: This is a function intended for ordinary users, buyers and sellers, to login into their respective accounts where each account will have its own permissions. The normal use case for this page is for the user to login into their account with no issues. The special case for this page is when the user does not put in the correct email address or password which will lead them to a wrong credentials message.

Account Management:

Buyer User: This is the function where buyers (ordinary users) can view their transaction history, rate (for the item and seller), file a complaint against sellers, and add their billing information.

Seller User: This is the function where sellers (ordinary users) can post item information to be sold. This includes pictures, videos (optional), title of the item, price range, bidding information (time and starting price), and item descriptions. Moreover, both buyer and seller can view the overall rating of the seller's account based on the following criteria: price, items as described, communication, and shipping time. And the overall number of raters for each criteria from previous customers.

Guest User: This is the function where guest users can browse through the website. These users can search for any available items based on title, keywords, price range, and ratings. They are able to report to the admins about any suspicious items that they have spotted on the site. As well as, apply to be an ordinary user to be able to buy or sell items.

Admin: This is the function where the admin can accept the registration of guest users to become ordinary users, determine if someone is qualified to be a seller, process orders, send warnings to sellers, view complaints, settle disputes, and collect transaction statistics.

Complaints Page:

File Complaints: This is the function where ordinary or guest users can file their complaints about their orders and/or suspicious items stolen.

View Complaints: This is the function where ordinary users and admin can view their complaints.

Dispute Complaints: This is the function where ordinary users can dispute complaints.

Manage Complaints: This is the function where the admin will decide how to handle the complaint and alert any necessary parties.

Buy OnDemand	Version: 1.0
Software Requirements Specification	Date: 1 / Nov / 22
First Draft	

Purchase Page:

Cart: This is a function that allows ordinary users to look at the items they've added to their cart, their prices, and quantity. They have the option to either continue shopping or continue to the checkout page. The special case is that the user is not logged in (meaning they're a guest and therefore cannot make a purchase or they're simply not logged in), and they'll be given a message to log in first.

Checkout Page: This function allows ordinary users to view the price and quantity of each item and total pricing. They enter their name, address, form of purchase, card information, and method of delivery. The method of delivery offers express shipping or standardized shipping. Express shipping will be more expensive than standardized.

Confirmation Page: This is the function that indicates the checkout went through successfully. The ordinary user can see the confirmation of their purchase. The special case is when the checkout went through unsuccessfully (reasons vary such as the expiration date on a credit card). In this case, the confirmation page will display an error message.

2.2 Assumptions and Dependencies

The dependency of this project is that we will use fake information for the items. One assumption we are making is that the guest users can only register as one role, the buyer or seller. Another assumption we are making is that the complaints from ordinary users are truthful. However, admins do have the power to justify and take action if needed for any dishonest complaints. Furthermore, we are also making an assumption that there is no identity theft, especially with ordinary users that are sellers.

3. Specific Requirements

3.1 Use-Case Reports

[Guests Use Case]

Use-Case: Guests apply to be ordinary users to be registered customers

Description: They can only choose to either be a buyer or seller. They will have to be approved by the Admin.

Use-Case: Browse the website

Description: Guests can browse the website and see the items being sold. They can filter the items based on ratings and price ranges. When in the "specific item page", if they click on the "add to cart" button, a special message will show up, telling the user to log in or sign up to be a registered ordinary user.

Buy OnDemand	Version: 1.0
Software Requirements Specification	Date: 1 / Nov / 22
First Draft	

Use-Case: Report an item

Description: If they see an item stolen or anything suspicious they can report it to the Admin.

[Ordinary Users: Buyers Use Case]

Use-Case: Browse the website

Description: Buyers can browse the website and see the items being sold. They can filter the items based on ratings and price ranges.

Use-Case: Order items and make purchase

Description: Buyers can add items to the cart and order. This will bring them to the checkout page where they will provide personal information such as name, address, and billing information. Once this is successful it'll bring them to the confirmation page and the buyer's money will be transferred to the seller.

Use-Case: Post ratings

Description: They can rate their experience with the seller and on the item they purchased. Both ratings will range from 1 (worst) to 5 (best) stars.

Use-Case: File a dispute

Description: If a complaint is made by the seller about the buyer, they have the right to dispute the complaint.

Use Case: View Order History

Description: The buyer can view their past purchase history. Including the total cost of the order, the quantity of each item, as well as see the rating they left for that order.

Use Case: Change account information

Description: Buyer is able to change account information--name, password, phone number, and credit card number.

Use Case: Place bids

Description: Set an amount to bid on an available item. The user will receive updates on the item, if another buyer places a higher bid, in which the user will decide to place a higher bid or give up.

[Ordinary Users: Sellers Use Case]

Use Case: Add items to sell

Buy OnDemand	Version: 1.0
Software Requirements Specification	Date: 1 / Nov / 22
First Draft	

Description: Sellers are allowed to add items to sell. This includes title, picture, video (optional), key words, price range, and description of the item.

Use Case: See all orders

Description: Sellers are able to see the history of orders including current and their status.

Use Case: Dispute complaints

Description: If a complaint is made about the seller or product, they have the right to dispute the complaint.

Use Case: Change account information

Description: Seller is able to change account information--name, password, phone number, credit card number.

Use Case: Settle bids

Description: Decides if the transaction will proceed. If the buyer proceeds, the buyer may choose who to sell the item to. If the highest bidder was not chosen, a reason should be provided to the admin.

[Admin Use Case]

Use Case: Process items to sell

Description: Process items the seller wants to sell. Decides if it should be published for buyers to view and order. Communicate any issues that hinder it from being successfully processed to the seller. In the case of bidding, oversee if the buyer's justification of who to sell the item to, is valid if the buyer was not the highest bidder.

Use Case: Manage and settle disputes

Description: They're able to view the complaint(s). They'll ultimately decide if it's a legitimate complaint and how to settle. If the product is suspicious/stolen then Admin will remove the item and generate a report to be sent to the police.

Use Case: Send warnings and removal of ordinary users

Description: Send warnings to both the buyers and sellers. Send warnings to sellers when they've received 2 complaints or when their overall average rating is lower than 2 with at least 3 evaluators. Send warning to buyers if the ratings are invalid/problematic. If both the buyer and seller received 2 warnings, this ordinary user should be removed from the system.

Buy OnDemand	Version: 1.0
Software Requirements Specification	Date: 1 / Nov / 22
First Draft	

Use Case: Collect transaction statistics

Description: Collect transaction statistics, the total amount of charges earned/spent, on a weekly basis of ordinary users.

Use Case: Process Applications

Description: Decide who can be ordinary users. If the application process is successful, the guest will become an ordinary user. If unsuccessful, deny the user with valid justifications.

3.2 Supplementary Requirements

Register: A guest must first create an account with a different and authentic email address in order to register as a user. An error message will appear saying that there is already an account registered with that email; if the email address they're trying to register with is already linked to another account, they are recommended to login into it rather than registering.

<u>Submit Purchase:</u> A buyer can place an order using their debit/credit card. The seller will receive the order and transaction. If the buyer has enough money on their card to cover the total amount of the order, then the order and transaction are successful. In other words, it went through. However, if an error occurs where the card does not cover the total amount of the order, the buyer will be instructed to add a different card.

Regular Bidding: A seller can choose whom to sell their product to. They can accept the highest bidding based on their individual bids. If the winning person's bidding price is not the lowest, the seller should provide justifications for their choice.

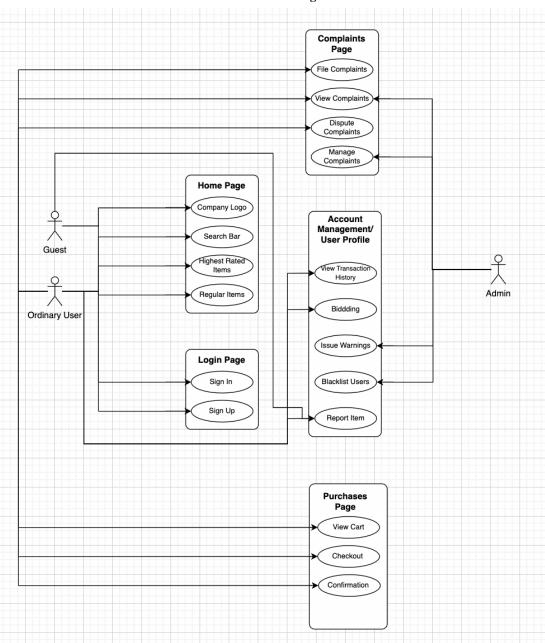
File Complaint: In the complaints section, an ordinary user can file a complaint about the item(s) purchased by buyers. The ordinary users have the opportunity to counter the complaints, and the admin will ultimately decide if the complaint is legitimate and whether the warning should be removed or remain in place.

Blacklisted Users: A removed ordinary user will be notified via email that their account has been removed and they can no longer log back in.

4. Supporting Information

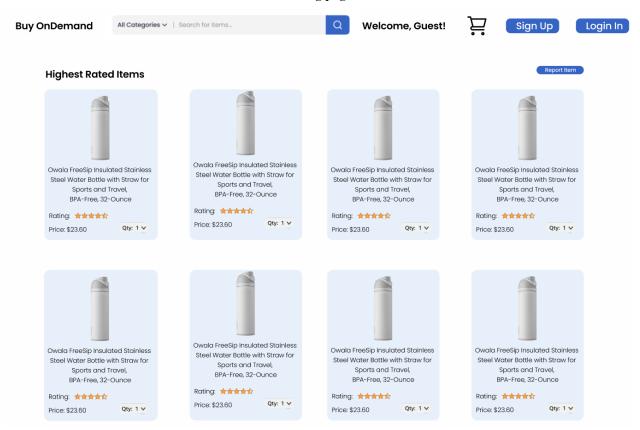
Buy OnDemand	Version: 1.0
Software Requirements Specification	Date: 1 / Nov / 22
First Draft	

Use Case Diagram

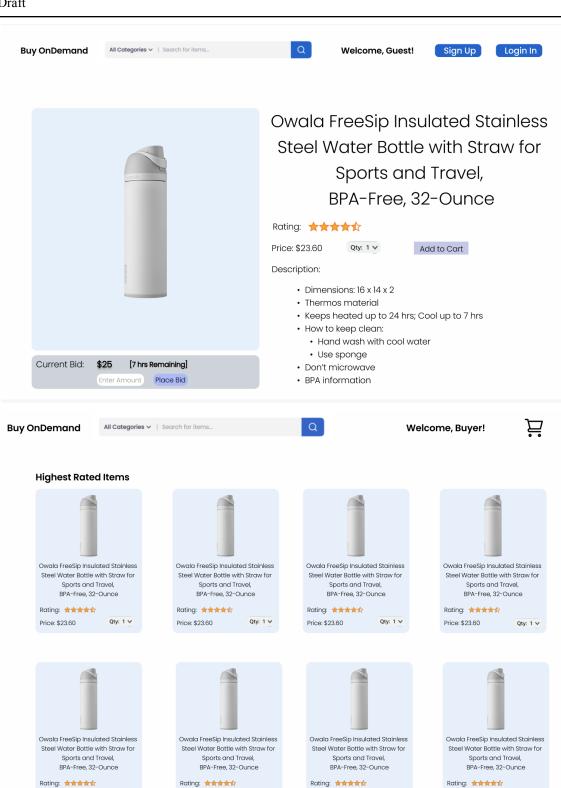


Buy OnDemand	Version: 1.0
Software Requirements Specification	Date: 1 / Nov / 22
First Draft	

Landing pages







Qty: 1 V

Price: \$23.60

Qty: 1 V

Price: \$23.60

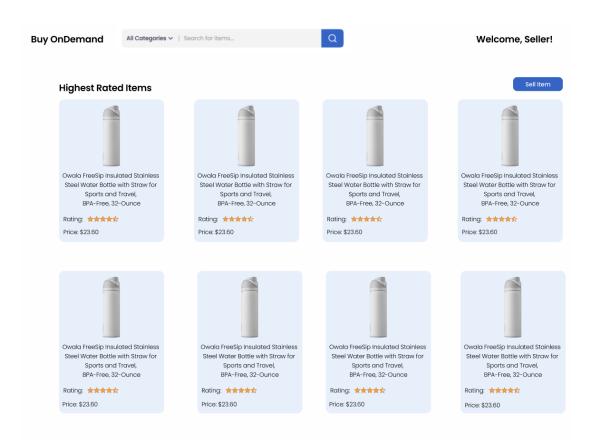
Price: \$23.60

Qty: 1 V

Price: \$23.60

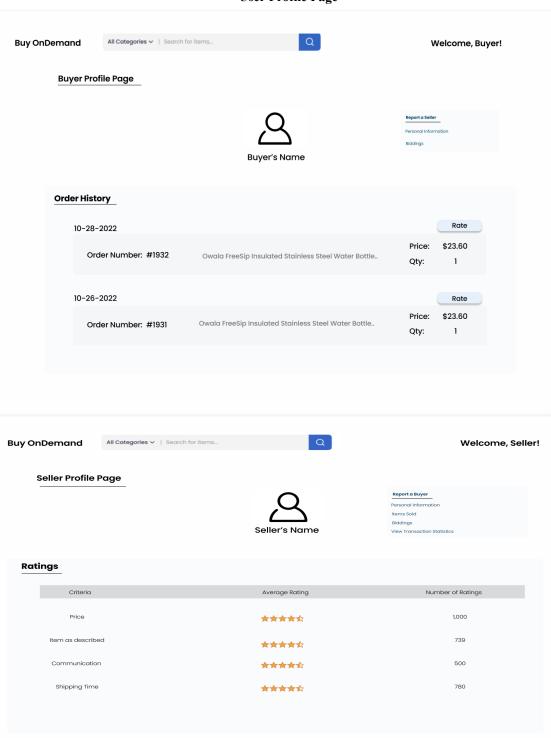
Qty: 1 V

Buy OnDemand	Version: 1.0
Software Requirements Specification	Date: 1 / Nov / 22
First Draft	

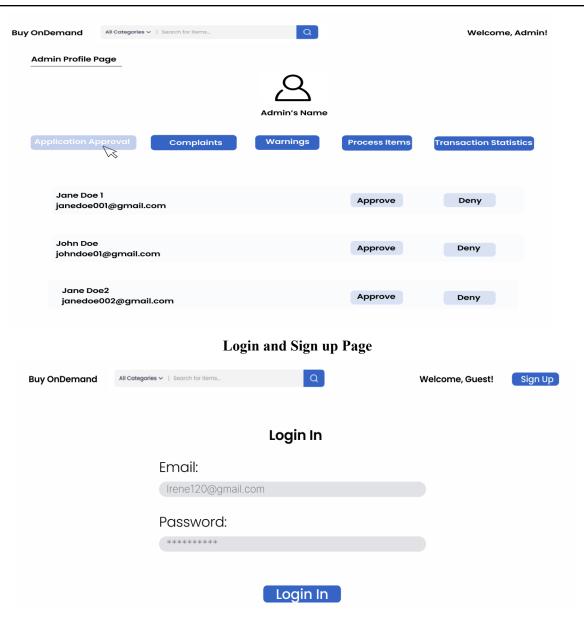


Buy OnDemand	Version: 1.0
Software Requirements Specification	Date: 1 / Nov / 22
First Draft	

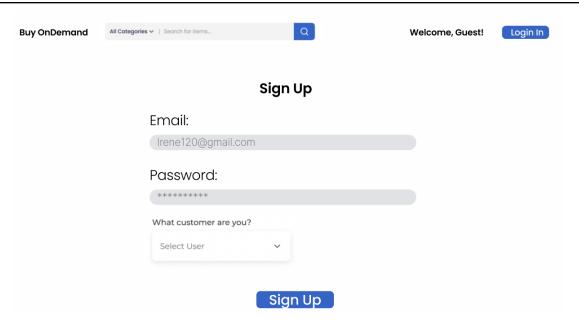
User Profile Page



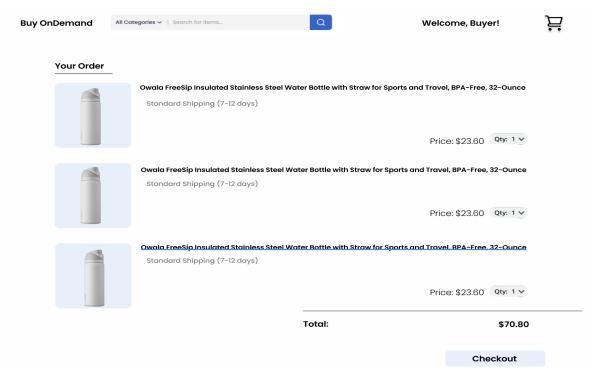
Buy OnDemand	Version: 1.0
Software Requirements Specification	Date: 1 / Nov / 22
First Draft	



Buy OnDemand	Version: 1.0
Software Requirements Specification	Date: 1 / Nov / 22
First Draft	



Purchases Page



Buy OnDemand	Version: 1.0
Software Requirements Specification	Date: 1 / Nov / 22
First Draft	

Complaints Page

