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# Software Requirements Specification

for

## The Dorm Room Dealer

Version <1.1>

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## Revisions

Version	Primary Author(s)	Description of Version	Date Completed
1.1	Akshat Gupta Akhil Sagwal Akshat Sarthak Motwani Milan Anand Raj Devesh Shukla Rahul Rustagi Vaibhav Chirania	First Draft. This version provides the details of the software and the vision of the team regarding its functionalities.	27/01/23
1.2	Akshat Gupta Akhil Sagwal Akshat Sarthak Motwani Milan Anand Raj Devesh Shukla Rahul Rustagi Vaibhav Chirania	Second Draft. This version provides the details of the software and the vision of the team regarding its functionalities.	23-04-2023

# 1 Introduction

## 1.1 Product Scope

Essentially, we aim to develop a software for facilitating buying and selling of commodities amongst the campus community. Our software, 'The Dorm Room Dealer' is intended for the campus student community. We plan to provide the campus junta a website on which they can upload the details of any product they wish to sell, such as its expected price, the current condition of the product, any relevant images, etc., and then any interested buyer can bid for that product on the website itself. Once someone bids for a product using our website, the seller gets a notification that someone is bidding that much amount for his product. If the seller thinks that he is happy with some bid, he may accept that user's bid, and then that buyer and seller can be provided each other's contact details using which they can then go ahead with the transaction as and when both of them agree to. During our stay here at IITK, we have come to realise that there are various things like coolers, heaters, bicycles, etc., that many campus residents need at some point during their stay at the campus but they don't feel the need to take them back home once they graduate and are rather more comfortable selling it second-hand to someone else such as their juniors, who would otherwise need to buy such items brand new even when they would only use it for a very limited period of time only at the campus. Many juniors therefore also feel the need for some designated online marketplace, where they can get a collection of such used products at a much more affordable price.

We can see that this website saves a lot of time and effort on both the buyer's as well as the seller's end as many-a-things pertaining to this process can be smoothly done online over the website itself in just a few minutes in a very systematic manner. This would allow the seller to earn some extra income and assist him/her in avoiding throwing away his item. This would help the buyer to buy those commodities that might be in good condition to use at a lower price.

## 1.2 Intended Audience and Document Overview

This document is intended for developers who are the students in the 15th project team, for testers who as well are the same students as the developers, the documentation writers who are the same students, the users who are the students in the whole campus, the instructor of the course as well as the TA mentor of this group to review it.

The rest of this SRS provides an overall description of the product, including functional and non-functional requirements for the project, as well as assumptions and constraints related to the implementation of the project. Section 2 discusses the overall description, functionality and design of the project. Section 3 provides details of user, hardware and software interfaces along with an elaboration of functional requirements for the software. Section 4 is primarily focused on the non-functional requirements of the project, which include safety and performance requirements as well as software quality attributes.

## 1.3 Definitions, Acronyms and Abbreviations

1. User Interface: The user interface (UI) is the point of human-computer interaction and communication in a device.
2. Hardware Interface: A hardware interface is a combination of mechanical, electrical, and logical signals that define how a piece of hardware communicates with the system.
3. Software Interface: A software interface allows you to access certain functionality in a system or a library without caring about the way it is implemented on the system.
4. EOD: End of the Day
5. Use Case: A use case is a written description of how users will perform tasks on your website. It outlines, from a user's point of view, a system's behavior as it responds to a request. Each use case is represented as a sequence of simple steps, beginning with a user's goal and ending when that goal is fulfilled.

## 1.4 Document Conventions

Arial Font with size 11 has been used in general throughout the document, except for headings. Italics, wherever used, indicate variable names which are to be replaced with appropriate values relevant to the context. Bold typography has been used for all headings and subheadings in this document. All subheadings within a heading numbered *H* have been numbered as *H.x*, where *x* is the position of that subheading amongst other subheadings under its parent heading. The same numbering convention has been followed recursively for subheadings within other subheadings.

## 1.5 References and Acknowledgments

Reference used:

- [https://www.utdallas.edu/~chung/RE/Presentations07S/Team\\_1\\_Doc/Documents/SRS4.0.doc](https://www.utdallas.edu/~chung/RE/Presentations07S/Team_1_Doc/Documents/SRS4.0.doc)

## 2 Overall Description

### 2.1 Product Overview

- The product is a replacement for certain existing systems.
- The product involves a bidding system to let everyone know the current value and importance of a particular product to someone.
- This bidding system helps prevent any payment-related issues like bargaining, secure portal system, and keeping in mind the target community it fits fine.
- Since our product is aimed at the campus community, verification and issues with the product after purchase can be handled by buyers and sellers with ease.

### User Interfaces

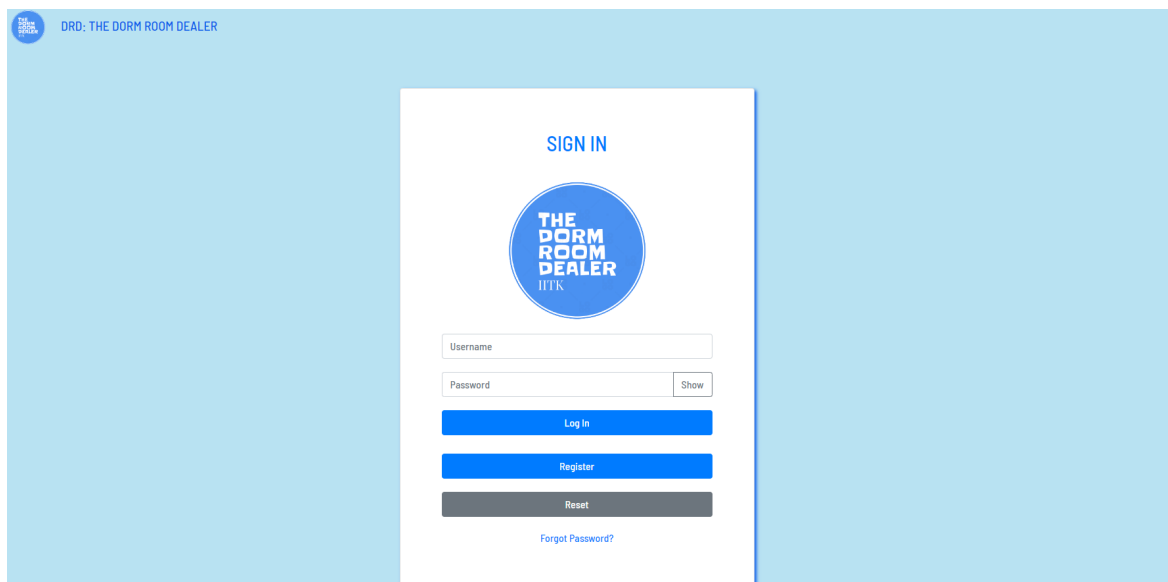


Figure 2.1.1 Login Page

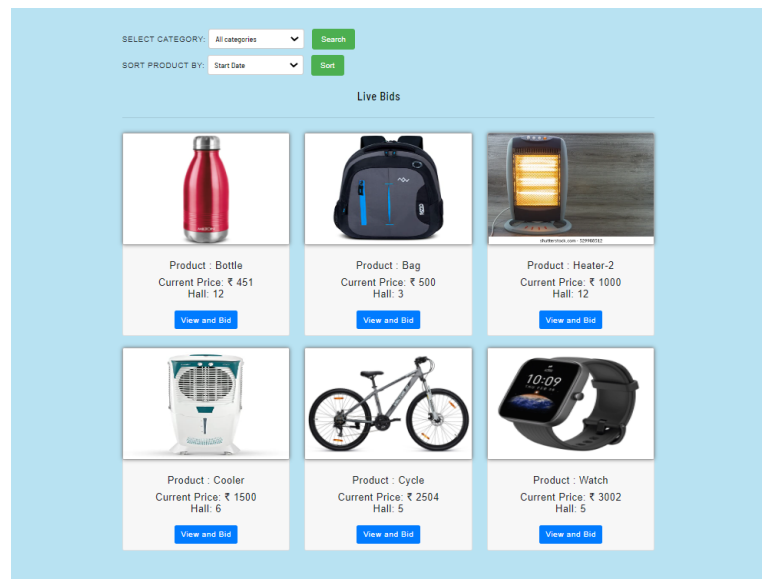


Figure 2.1.2 Display of Products

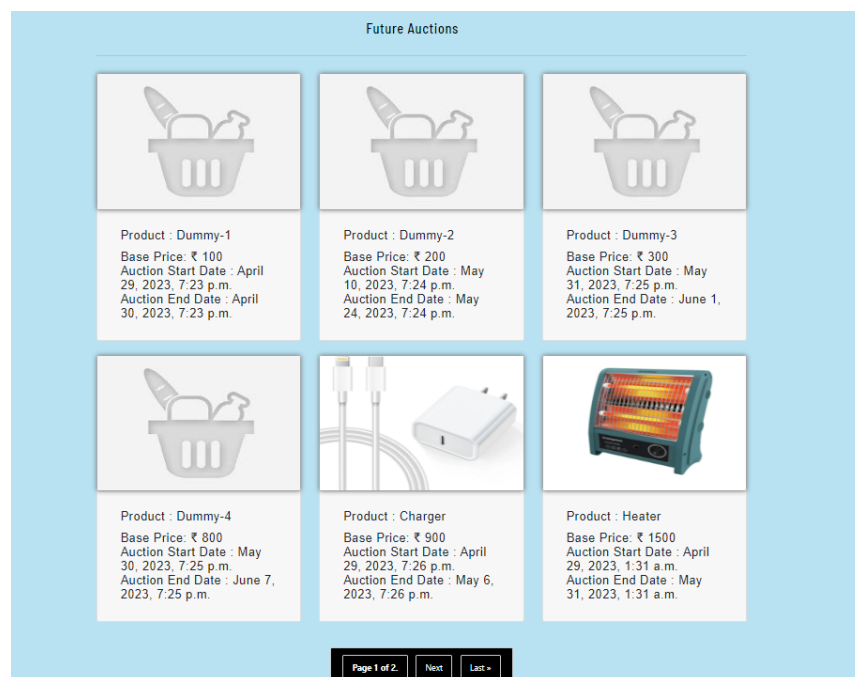


Figure 2.1.3 Future Auctions on the homepage.

## 2.2 Product Functionality

- The system shall provide each user with an entry portal to be able to log in.
- The user should be able to upload his item:
  - Tag it with existing category labels
  - Mention a minimum price below which the system should not accept any biddings.
  - Add start date and end date to for an auction
  - Receive notifications whenever a prospective buyer bids for that item.

- The product has a list of categories that the user can choose and view all “active” products related to the category.
- The user can also sort the listed products on the basis of: Start Date, End Date, Price Ascending, Price Descending
- The portal shall allow users to enter their bidding on any product.
- The system shall allow the seller to end the auction or the auction will end after the date that we have specified:
  - The product will go to the highest bidder after the auction ends.
- The system should allow the seller to provide detailed information about his item, such as the age of the item, its features, and pictures of the item.

Figure 2.2.1 Page to add items

Fig 2.2.2  
Dashboard page with selling and bidding history



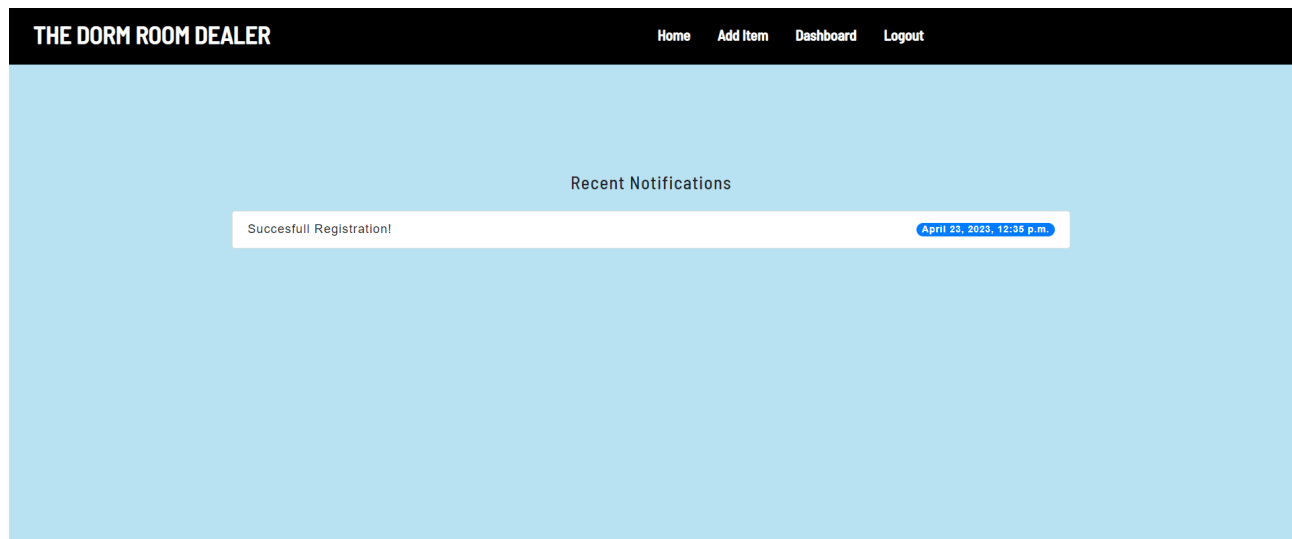


Fig 2.2.3 Notifications page

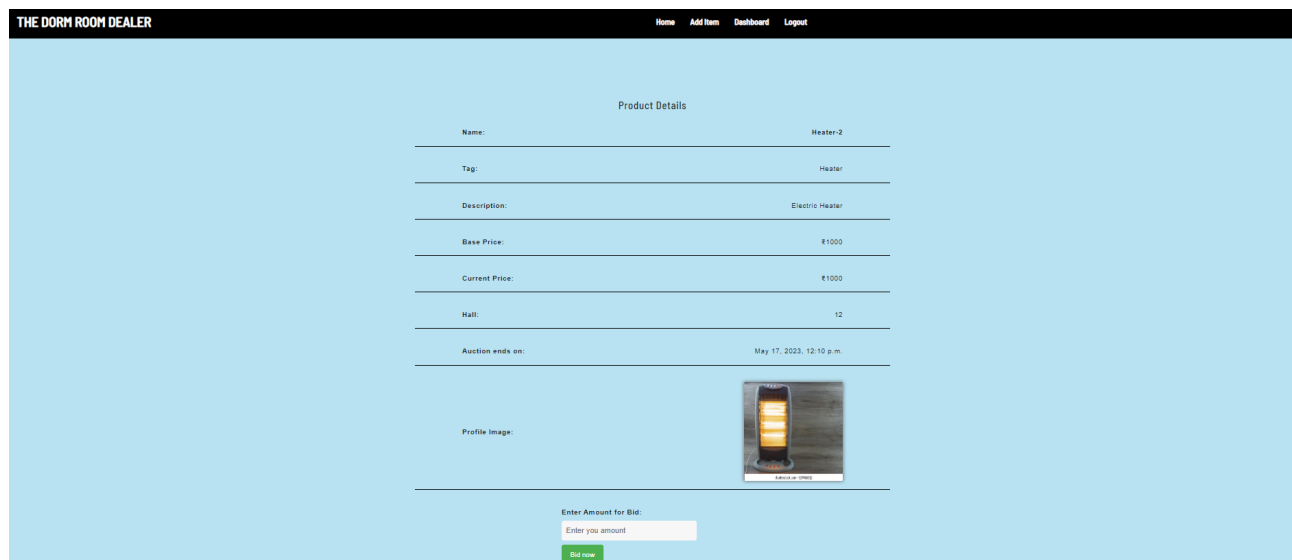


Fig 2.2.4 Page to place your bid for a product

## 2.3 Design and Implementation Constraints

- The online marketplace must utilize a modern user interface framework to ensure a user-friendly and easy-to-navigate experience for college students.
- The system must be built on a robust and scalable architecture to handle high concurrent user traffic.
- The system must be designed to handle the specific needs of college students, including the ability to filter.
- The system must be mobile-responsive using responsive web design techniques or similar solutions, to ensure that users can access the marketplace on different devices.

- The system must be built on a robust and scalable data storage solution to handle a large amount of data, such as a NoSQL database or similar solution.
- The developers will have to design the system to handle user authentication and authorization, and to protect sensitive data, in compliance with relevant security standards and regulations.

## **2.4 Assumptions and Dependencies**

- The project is developed using modern web development technologies such as Django. If this assumption is incorrect, the development effort and timeline may be affected.
- The project will assume that the user has an active college email address to ensure that the marketplace is only accessible to the campus community. If this assumption is incorrect, the system will not be able to ensure that the marketplace is only accessible to the intended audience.

## 3 Specific Requirements

### 3.1 External Interface Requirements

#### 3.1.1 User Interfaces

The system shall provide a familiar interface to the users. Simple sign up and sign in pages, text bars to search product categories, notifications icon, easy navigation between different pages of products, clickable link for and within each product so that user can view product description, text bar to enter the bidding amount and button on navigation bar for logging out, are intuitive features in the website.

#### 3.1.2 Hardware Interfaces

Monitor Screen - The system shall display all the information associated with the website via the monitor screen.

Mouse - The mouse shall execute all command buttons, activate areas for data input and select options from the menus.

Keyboard - The system shall allow the user to enter text using the keyboard into the active areas of the database.

#### 3.1.3 Software Interfaces

- From the client's side, the website will be accessible from a modern web browser such as Google Chrome, Mozilla Firefox, etc.

Endpoints / URLs:

- 'register' : associated with the register view function
- 'home' : associated with the home view function
- 'dashboard' : associated with the dashboard view function
- 'notifications' : associated with the notifications view function
- 'edit\_profile/' : associated with the edit\_profile view function
- 'additem' : associated with the additem view function
- 'biditem': associated with the biditem view function
- 'successfullBid': associated with the successfullBid view function

Handlers:

- login: function to handle the login of a user through a POST request
- register: function to handle the SignUp of a user through a POST request

- home: function to render the live and future items, handles search by category through a POST request.
- notifications: function to add notifications in the notifications page
- dashboard: function to render profile details of a user, including the selling and bidding history. Handles the End Auction feature through a POST request.
- edit\_profile: function to handle the profile edit of a user through a POST request
- additem: function to handle the uploading of product details through a POST request.
- successfullBid: function to handle the processing of bid entered by a bidder through a GET request

## 3.2 Functional Requirements

(Note: The term 'seller' in a requirement refers to a user, who wishes to sell her products, through our portal. The term 'buyer' here refers to the user who wishes to buy a product and has placed a bid for that product.)

Note: Highlighted in Yellow are some modifications/ additions in the original functional requirements.

Note: highlighted in Blue are the requirements in the future development plan.

Note: highlighted in green is the additional functionality implemented in our website.

### 3.2.1 Maintenance of the user's profile.

3.2.1.1 The system shall allow the user to create a profile and set her credentials.

3.2.1.2 The system shall make sure that these credentials are unique for each user.

3.2.1.3 The system shall enable the user to login using her credentials.

3.2.1.4 The system shall allow the user to view as well as update her profile information.

### 3.2.2 Allow users to sign up and sign in.

3.2.2.1 The system shall allow each user to provide her First Name, Last Name, Hall Number, Contact number and User name to create her profile in the portal.

3.2.2.2 The system shall allow each user to provide their IITK email address while signing up.

3.2.2.3 The system shall allow each user to set a password for their profile.

3.2.2.4 The system shall allow each user to log in using their username and password.

3.2.2.5 If a user wishes to change the password of her profile, the system shall allow that through email confirmation.

3.2.2.6 If a user has forgotten her password, the system shall allow the user to reset her password after email confirmation.

### **3.2.3 Allow Selling of Products**

3.2.3.1 The system shall allow each user to list the product(s) they wish to sell.

3.2.3.2 The system shall enable the user to provide detailed description of the product they wish to sell.

### **3.2.4 Allow Describing Product's Details**

3.2.4.1 The system shall allow the seller to provide necessary tags corresponding to the type of their product.

3.2.4.2 The system shall allow the seller to provide the item name of their product.

3.2.4.3 The system shall allow the seller to describe the features of their product in detail, including their conditions and reasons for selling the product in the description box.

3.2.4.4 The system shall allow the seller to set a minimum price i.e. base price for their product.

3.2.4.5 The system shall allow the seller to upload one or multiple images of their product.

3.2.4.5 The system shall allow the seller to provide a start and end date for their product.

3.2.4.6 The system shall allow the seller to keep the start date of the auction at a future date. The product will be available for bidding at the future date specified by the seller.

### **3.2.5 Allow Product Categorizations**

3.2.5.1 The system shall categorize each product based on the tags given the seller of the product.

### **3.2.6 Provide Search Facility**

3.2.6.1 The system shall display product category which has been selected through the drop down menu of the SELECT CATEGORY option by the user.

### **3.2.7 Display of Products**

3.2.7.1 The system shall display details of around atmost 6 live products and 6 future products in one page, based on the search of the user.

3.2.7.2 The details of remaining products shall be displayed in subsequent pages, with each page containing details of around 6 live products and 6 future products.

3.2.7.3 The system shall enable the user to navigate between these pages.

3.2.7.4 The system shall allow the user to sort the products according to their prices, both from highest to lowest and lowest to highest.

3.2.7.5 The system shall display an image, the base price and the name of the product corresponding to each of the 6 live products and 6 future products in a single page.

3.2.7.6 The system shall allow the user to click on any product for viewing the detailed description of that product given by the seller.

### **3.2.8 Display of a Particular Product**

3.2.8.1 The display of a particular product shall contain the item name, description of the product provided by the seller, price mentioned by the seller and the images of the product uploaded by the seller.

3.2.8.2 The system shall enable the user to click on each of the images for an enlarged view of the image.

3.2.8.3 The system shall allow the user to enter an amount as a bid for the product.

### **3.2.9 Bidding of a Product**

If the user has entered a bid for some product:

3.2.9.1 The system shall not allow the user to enter a bidding amount which is less than the minimum price stated by the seller.

3.2.9.2 The system shall ask for a confirmation from the user regarding the bid she has entered.

3.2.9.4 The system shall allow the user to enter her contact information, to be given to the seller only if she accepts the bid, after the bid has been placed.

3.2.9.5 The system shall allow the user to cancel her bid anytime before the bid has been accepted by the seller.

### **3.2.10 Provide Bidding History**

3.2.10.1 The system shall provide each user a history of all the bids written by him/her.

3.2.10.2 The system shall allow the user to access each bidding history, including the amount of bid placed by him/her and all the details of the product corresponding to that bid.

### **3.2.11 Acceptance of a Bid by the seller**

3.2.11.1 Once a buyer has placed a bid for a product, the system shall send a notification to the seller that a bid has been placed for her product.

3.2.11.2 The system shall display the price at which the bid has been placed.

3.2.11.3 The system shall allow the seller to either end the auction now and accept the current highest bid or let the auction end at the end date.

3.2.11.4 At the end of the auction (irrespective of whether the auction was ended by the seller before the end date or the auction ended automatically at the end date) , the system shall notify the contact information of the buyer to the seller.

3.2.11.5 At the end of the auction, the system shall send a notification to the highest bidder that they are the winner of the auction.

3.2.11.6 The system shall enable the highest bidder to access the contact information of the seller.

### **3.2.12 Maintain Selling History**

3.2.12.1 The system shall maintain a history of the details of the last two products that were listed by the seller and were successfully removed from the portal after acceptance of the bid.

3.2.12.2 The system shall allow the user to republish her product in the portal through the selling history page, if for some reason the product was not sold to the prospective buyer (whose bid was accepted by the seller).

### 3.3 Use Case Model

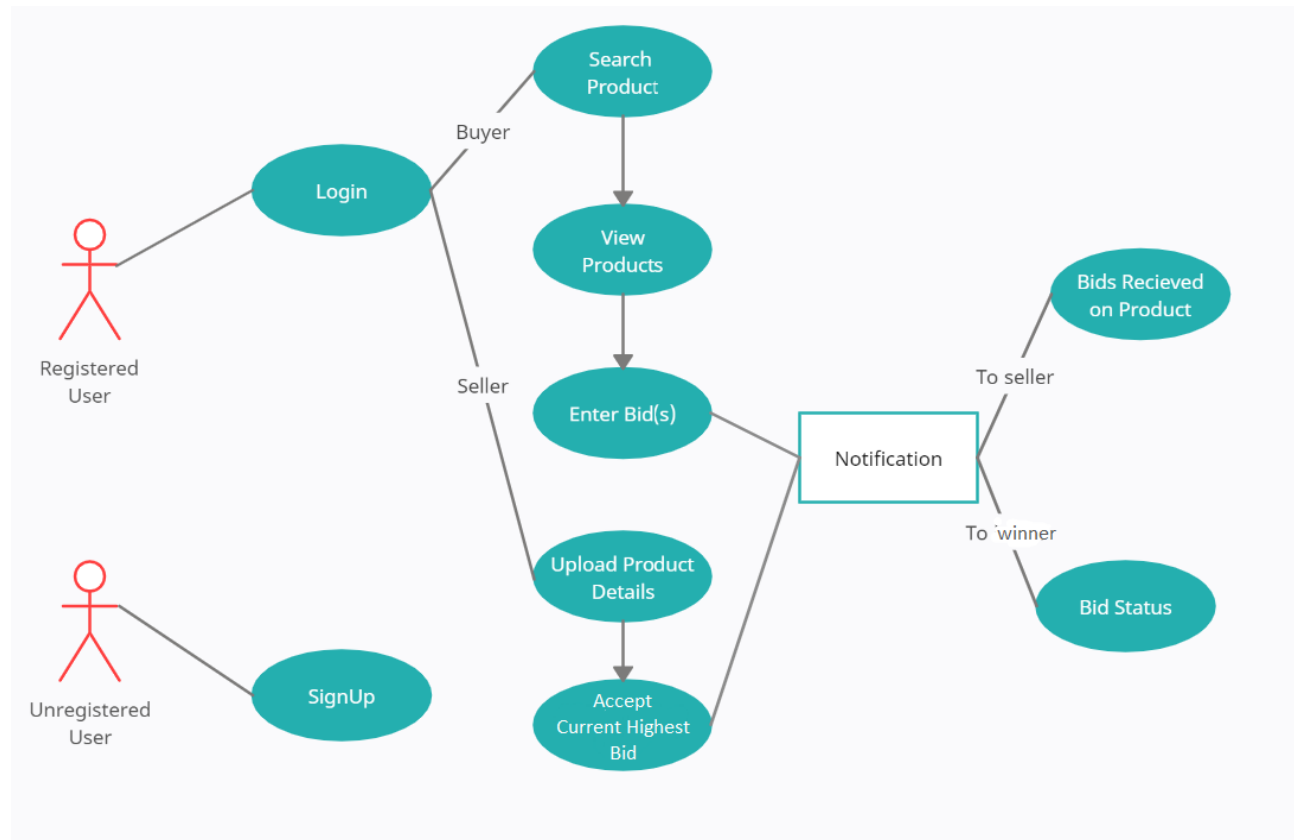


Figure-3.3 : Use-Case Diagram for the entire System

#### 3.3.1 Use Case #1 (User Sign-up and Sign-in, Unique Identifier – U1)



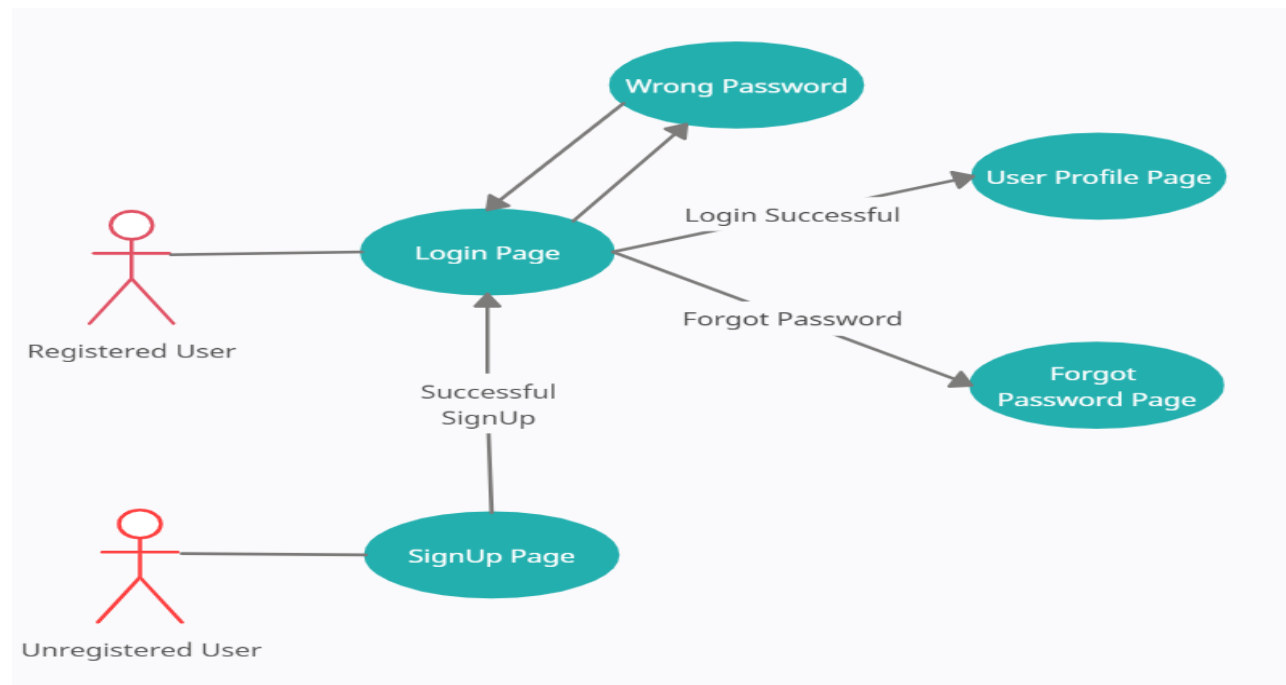


Figure- 3.3.1 : User Sign-up and Sign-in

**Author** – Sarthak Motwani

**Purpose** - The *User Sign-up and Sign-in* use case describes how a registered user signs in and how an unregistered user signs up in the system. If a registered user has entered a wrong password in the login page, she is redirected back to the login page. If a registered user has forgotten her password, she is redirected to the forgot password page. If the user has entered the right login credentials, her user profile opens up.

**Requirements Traceability** – The requirements traced by this use case diagram are - **Maintenance of user's profile** and **Allow users to sign up and sign in**.

**Priority** - This is a **high** priority use case. The users cannot proceed to bid or sell products through the portal without creating their profile and logging in.

**Preconditions** - A registered user would have created her account in the portal in the past and thus, it is expected that the users possess their login credentials before signing in.

**Post conditions** - An unregistered user would have successfully created her profile in the portal. A registered user would have successfully signed in and can now proceed to view and/or bid and/or sell their products through the portal.

**Actors** – A registered user (human), an unregistered user (human) and a user authentication system to verify that the credentials of a user match with those stored in the database.

### 3.3.2 Use Case #2 (Display of Products and Bidding, Unique Identifier – U2)

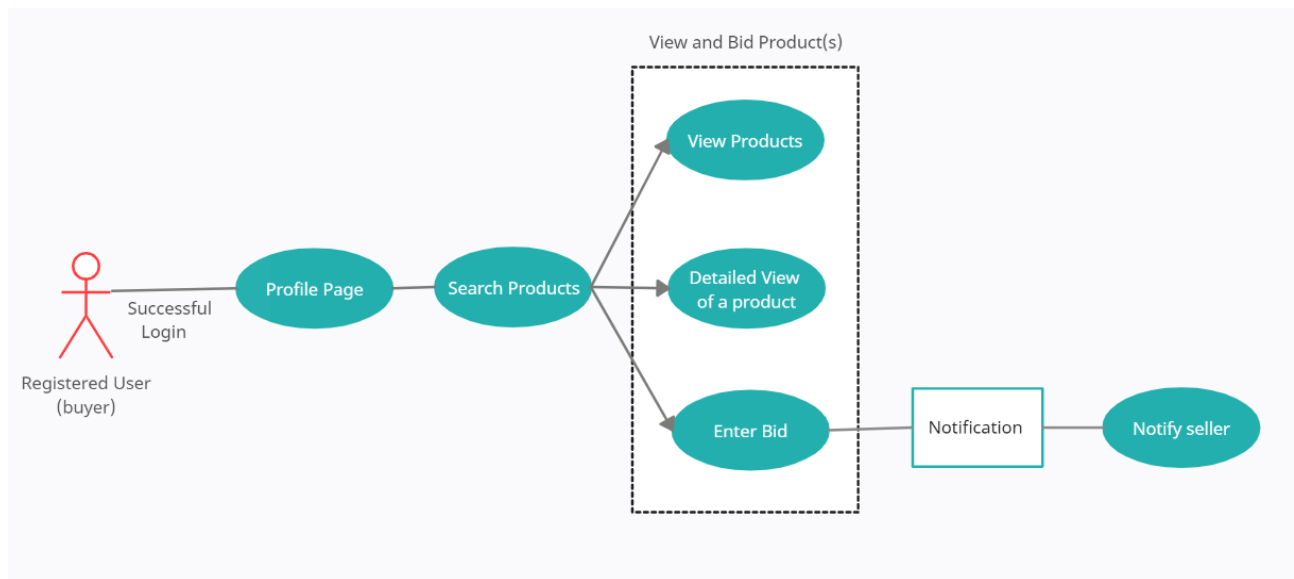


Figure 3.3.2: Display of Products and Bidding

**Author** – Vaibhav Chirania

**Purpose** - This use case provides a high level picture of how a registered user can view the products listed in the portal. The user starts by searching product categories available in the portal. Based on this search, the products are displayed. A user can also view a detailed description of each product (including the price posted by the seller). She can also place a bid for one or more products, with each product's seller receiving a notification of the same.

**Requirements Traceability** – The requirements traced by this use case are - **Provide Search Facility, Display of Products, Display of a particular product and Bidding of a product.**

**Priority** - This is a **high** priority use case. The entire purpose of the portal is to make search, display and bidding convenient to the users and thus, this requirement has to be satisfied.

**Preconditions** - A registered user must have successfully logged in into the system before the deployment of this use case.

**Post conditions** - If a user has placed a bid for a particular product, the seller of that product shall be notified about the amount of bid that is requested by the buyer. The seller reserves the sole right to accept or reject a particular bid.

**Actors** – A registered user (human) that views and bids for products and a web service that automatically notifies the seller if a bid has been placed for her product.

**Includes** (other use case IDs) - U1 and U3.

**Notes/Issues** - The seller can access the contact information of the buyer only if the seller has accepted the bid of a buyer.

### 3.3.3 Use Case #3 (Uploading of Product Details by the seller, Unique Identifier – U3)

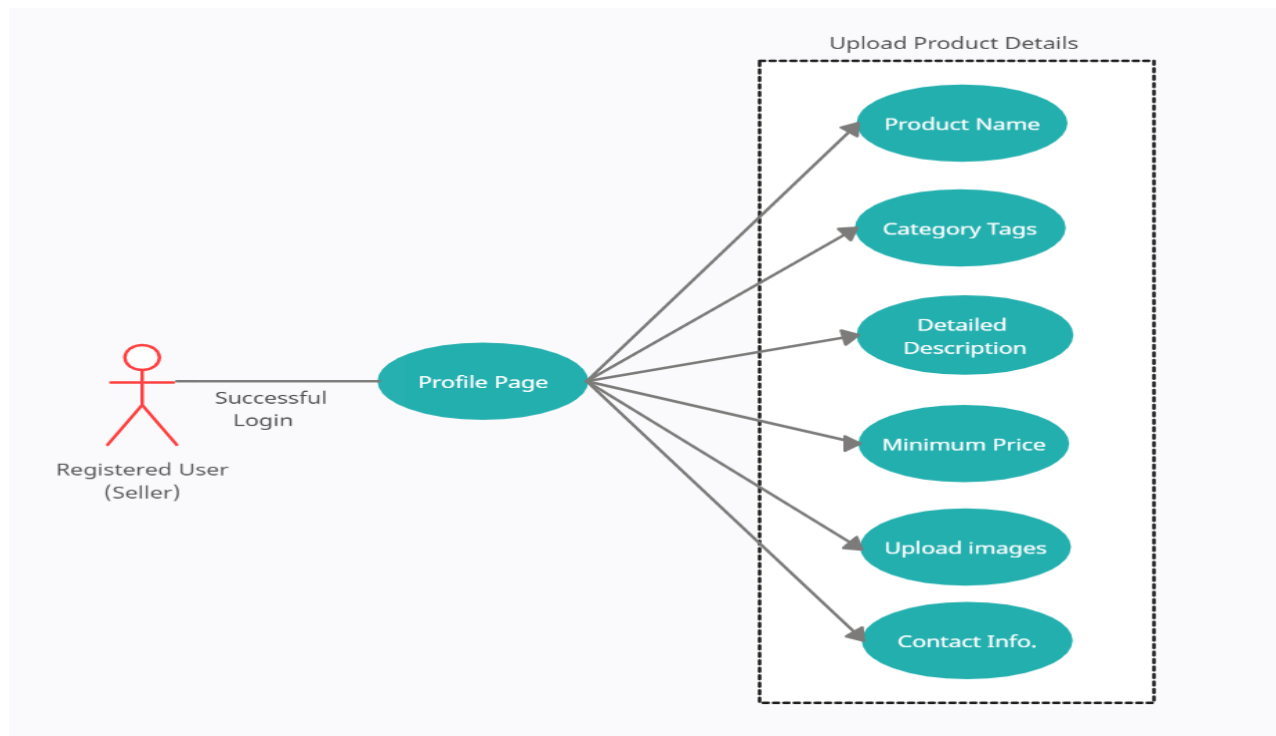


Figure-3.3.3: Uploading of Product Details by the seller

**Author** – Sarthak Motwani

**Purpose** - This use case provides a pictorial view of how a seller can list her products in the portal. The system shall allow the user to provide the product name and the brand to which the product belongs. The seller has to provide tags for the product based on the product category, along with an elaborate description of the product. The seller has to set a minimum price below which the system shall not accept any biddings. The system shall allow the seller to upload multiple images of her product and provide her contact information.

**Requirements Traceability** – The requirements traced by this use case are - **Allow Selling of Products**, **Allow Describing Product's Details** and **Allow Product Categorizations**.

**Priority** - This is a **high** priority use case. This use case is a high-level description of how a user, who wishes to sell her products through our portal, can list their products with appropriate details to the prospective buyer. Thus, this requirement forms a crux of the purpose to be fulfilled by the portal.

**Preconditions** - A registered user must have successfully logged in into the system before the deployment of this use case.

**Post conditions** - Once a seller has provided her product details in the portal, this product shall be visible for bidding to every registered user in the portal when a user searches for a product category corresponding to this product.

**Actors** – A registered user (human), who wishes to sell her products through the portal.

**Includes** (other use case IDs) - U1

**Notes/Issues** - The buyer shall be given access to the contact details of the seller, only if her bid is accepted by the seller.

### 3.3.4 Use Case #4 (Bids as seen by the Seller, Unique Identifier – U4)

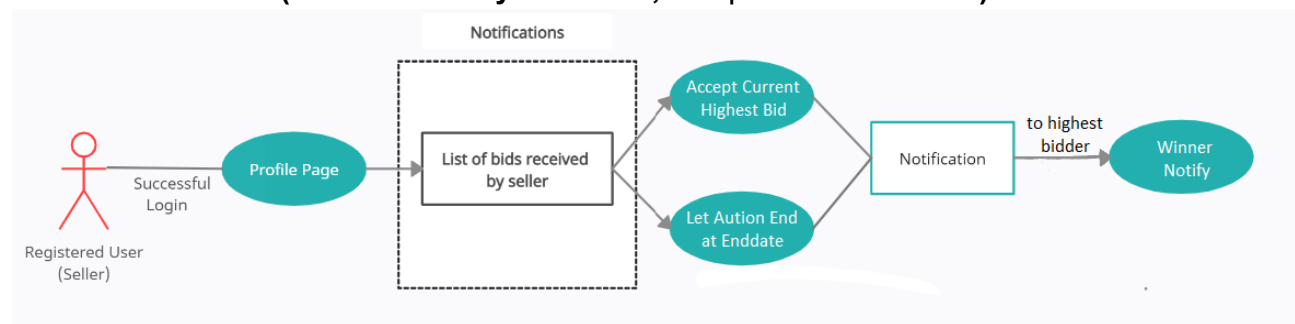


Figure-3.3.4 : Bids As Seen By the Seller

**Author** – Vaibhav Chirania, Sarthak Motwani

**Purpose** - This use case is a high-level portrayal of how a seller receives, through notifications, the list of bids placed on her product. At any time before the end date of the auction, the seller can choose to stop the auction and the highest bidder is the winner. Alternatively, the seller can also wait for the auction to end by default at the end date and the winner is then the highest bidder before the end date. At the end of the auction, the system notifies the highest bidder that they are the winner of the auction.

**Requirements Traceability** – The requirement traced by this use case is - **Acceptance or Rejection of a Bid by the seller.**

**Priority** - This is a **high** priority use case. This use case allows the seller to view all the bids received on her product and can then decide to accept the best bid among all.

**Preconditions** - A registered user must have successfully logged in into the system before the deployment of this use case. Also, she would have listed her product(s) in the portal to receive bids for that product.

**Post conditions** - If the seller has accepted a particular bid, the system shall give the seller the access to that buyer's contact information and that buyer shall also be given access to the seller's contact information. The system shall notify the seller that her product is removed from the portal.

**Actors** – A registered user (seller), who has listed her products in the products and a web service that automatically notifies the seller about the list of bids and notifies the buyer about the acceptance or rejection of their bid.

**Includes** (other use case IDs) - U1, U2, U3

### 3.3.5 Use Case #5 (Acceptance of the highest bid, Unique Identifier – U5)

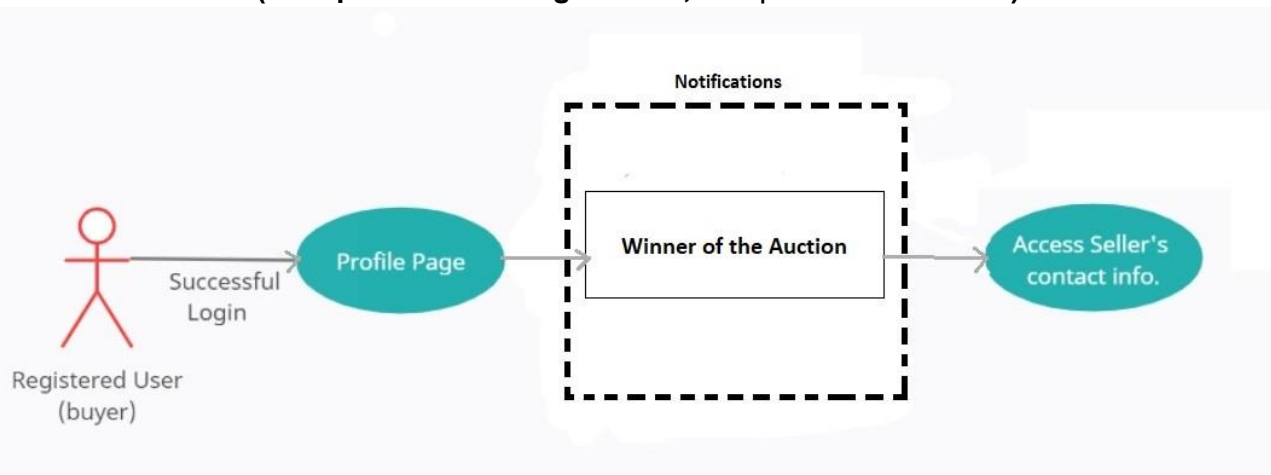


Figure - 3.3.5 : Status of Bid Acceptance or Rejection

**Author** – Sarthak Motwani

**Purpose** - This use case depicts how the highest bidder of an item is notified regarding winning the auction. The system grants that bidder access to the seller's contact information.

**Requirements Traceability** – The requirement traced by this use case is - **Acceptance or Rejection of a Bid by the seller.**

**Priority** - This is a **high** priority use case because this use case allows the buyer to be notified about the status of the bid placed by her on a certain product.

**Preconditions** - A registered user must have successfully logged in into the system before the deployment of this use case. Also, she would have already placed a bid for a certain product, the status of which is being notified in this use case.

**Post conditions** - The system shall also automatically remove this product from the portal, if the seller has accepted a bid for her product.

**Actors** – A registered user (buyer), who has placed a certain bid for a particular product and a web service that automatically notifies the buyer about the status of her bid.

**Includes** (other use case IDs) - U1, U2, U3, U4.

## 4 Other Non-functional Requirements

### 4.1 Performance Requirements

- The software should process the bids to the seller as quickly as possible to avoid missing better deals.
- If two or more bids are made at the same time, the software should notify the seller simultaneously to avoid biasing the software and let the seller decide whom to sell.
- The software should be scalable to the whole campus community so that no client misses the opportunity.
- When you start searching the product to buy, the software should try to have the categories that are exhaustive.
- In order to prevent client side memory overhead, cache stored on the client side should be limited and pertinent.

### 4.2 Safety and Security Requirements

- Data leak related to the user's contact details is a possible concern while using the application. However, as actual transactions would not take place through the application, the security risks associated with it greatly decrease.
- Login system should prevent unauthorized access to the application. Users would be allowed to access the application with an IITK email-id.
- The system shall automatically log out all customers after a period of inactivity.
- The system shall not leave any cookies on the customer's computer containing the user's password or other confidential information.
- The customer's web browser shall never display a customer's password. It shall always be echoed with special characters representing typed characters.
- The back-end servers of the system must never display a customer's password. The customer's password may be reset but never shown.
- The system's back-end servers shall only be accessible to authenticated administrators.
- The system's back-end databases shall be encrypted.
- The seller's contact should not be visible unless she accepts the bid.

### 4.3 Software Quality Attributes

#### 4.3.1 Usability:

- The sign in and sign up process will be simple.

- The error messages on unsuccessful login will be easily comprehensible. The error will clearly indicate why the sign-up or login is failing with a clear comments on every incorrect entries.
- There should be a maximum limit of the number of products on a single page(six current and six future). This will create a better user experience by preventing huge loading time for the website.
- The system should maintain the user's profile and enumerate all the products sold or bought upon successful logins.

#### 4.3.2 Adaptability:

- Website should be compatible with Windows, Linux, and MacOS.

#### 4.3.3 Availability

- Our software will have a latency on page load time at most 20ns. The computation, decision points in the pathways of a request and caching will be used efficiently to reduce the latency.

#### 4.3.4 Correctness

- When a product is "sold," the product should be removed from available products.

#### 4.3.6 Portability

- The backend features and functions should be sufficiently abstracted to allow the developers to switch the software to a different database management system whenever necessary.
- When creating an application, keep in mind that it should be easily switchable between operating systems.

#### 4.3.7 Robustness

- The software ought to offer "others" options or at least some abstract options when a seller wants to sell a particular commodity but the desired commodity type is not available.
- The system should display all the information pertaining to the selected products to the buyer.

#### 4.3.8 Reliability

- There will be two databases so that any failure can be recovered easily.
- The software should be reliable for both buyer and seller.
- The buyers should be given a prompt that her bid has been forwarded to the relevant seller.
- The software ought to include a deadline for the auction so that the buyer can move on to another pertinent item that is for sale.
- There should be a section where clients can lodge any complaints/suggestions relating to the user's requirements so that developers can adapt to them later.

#### 4.3.9 Interoperability

- The software can run on windows, linux, iPad etc.

#### 4.3.10 Maintainability

- Adding relevant features according to the feedback of the clients of the software should be easy.

#### 4.3.11 Reusability



- Relevant classes or functions that are already available on the internet should be used in the implementation of the software so that more time can be devoted to other novel features/functions.
- The codes should be reusable for other relevant software.

#### 4.3.12 Scalability

- We are expecting to handle 1000 transactions a day in the initial version of software.

#### 4.3.13 Flexibility

- The software will run smoothly on any device, platform, or operating system.

## 5 Other Requirements

<This section is **Optional**. Define any other requirements not covered elsewhere in the SRS. This might include database requirements, internationalization requirements, legal requirements, reuse objectives for the project, and so on. Add any new sections that are pertinent to the project.>

## Appendix A – Data Dictionary

*<Data dictionary is used to track all the different variables, states and functional requirements that you described in your document. Make sure to include the complete list of all constants, state variables (and their possible states), inputs and outputs in a table. In the table, include the description of these items as well as all related operations and requirements.>*

### User Class(Customer as well as seller):

Element Name	Description	Attributes	Operations
User	Each user registers using an User ID, Email ID and Password which will be later used to login into their account. Also the user has to add details like Hall, Contact Number and Name	1. userId: string 2. emailID : string 3. password: string 4. Hall: Integer 5. Contact Number: Integer 6. Name: String	1.register():registration of a user using the application for the first time. 2. login() : called while the user wants to login. 3. edit_profile():used to edit the details of the user. 4. logout(): used to logout from application

### Product Class:

Element Name	Description	Attributes	Operations
Item	The products that are available for auction or will be available in near future. Each product has a Name, Description and a Current Price	1. name: string 2. profile: image 3. img1: image 4. img2: image 5. description string 6. location: integer 7. basePrice: integer 8. currentPrice: integer 9.start_date: datetime 10. end_date: datetime	1. productStatus():used to update the status of the product 2.additem(): used to add an item by a user 3.biditem(): used to bid on an item 4.successfullBid(): used to check whether a bid was placed correctly and then inform the seller.

## **Appendix B - Group Log**

<Please include here all the minutes from your group meetings, your group activities, and any other relevant information that will assist in determining the effort put forth to produce this document>

16/01/23 - Meeting between all 8 members to discuss the SRS document. Work was evenly distributed among all the members, with 2 people working on each section.

18/01/23 - First Meeting with the TA to discuss the SRS document and we clarified important doubts pertaining to the SRS document as well as the rest of the project.

24/01/23 - Online Meeting with the TA to discuss the SRS document and get his input. Appropriate changes were made to the document afterward.

All of us were in constant touch through the whatsapp group all the time. Even though 2 people worked on each section and the sections were written independently, we made sure through constant discussion that the sections are in sync with each other and the document remained consistent.