REAL ESTATE WEBSITE

UCS503 Software Engineering Project Report End-Semester Evaluation

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> BE Third Year, COE Group No: 3COE18

Submitted to
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1. Project Selection Phase

1.1 Software Bid:

Group: <u>3CO18</u> Dated: 21/9/2023

Team Name: Trailblazers

Team ID (will be assigned by Instructor):

Please enter the names of your Preferred Team Members.

• You are required to form three to four-person teams

• Choose your team members wisely. You will not be allowed to change teams.

Name	Roll No	Project Experience	Programming Language used	Signature
Daksh Kumar Nahar	102103481	Block Chain Reward System Blood Bank Management Joke telling Bot web app	Python, SQL, Html, CSS JavaScript Solidity	July -
Ishita Suchdeva	102103493	Smart Parking Spam Email Detector (ML) Employee management System	JavaScript React Python SQL ASP.NET	South
Selina Varshney	102103496	News Webscraper Fingerprint Recognition System Personal Finance Tracker	Python ReactJS JavaScript	delina
Vanshika Narang	102103510	Nestaurant Management System Spam Email Detector Machine learning web app	Streamlit, SQL, JavaScript, Tailwind, Python	Vordites

Programming Language / Environment Experience

List the languages you are most comfortable developing in, as a team, in your order of preference. Many of the projects involve Java or C/C++ programming.

JavaScript

- 2. C++
- 3. Python

Choices of Projects:

Please select **4 projects** your team would like to work on, by order of preference: [Write at least one paragraph for each choice (motivation, reason for choice, feasibility analysis, etc.)]

First Choice	Real Estate Management: Create a comprehensive real estate website and web application using the MERN stack, which includes MongoDB, Express, React, and Node.js. The main objective is to offer users a seamless platform to search for properties, access detailed property information, schedule visits, curate a list of favourite properties, and enable property owners to list their properties. Our project aims to redefine the property hunting experience by creating a user-friendly real estate platform. We want to empower users with a seamless way to search for properties, access detailed information, schedule visits, and curate a
	list of favorite properties. Property owners can also list their properties with ease.
Second Choice	Driver Drowsiness: On road driver's fatigue and drowsiness is contributing more than 30% of reported road accidents. Driver drowsiness can be estimated by monitoring biomedical signals, visual assessment of driver's bio-behavior from face images, by monitoring drivers performance or by combines all above techniques. Proposed algorithm is based on live monitoring of EAR(Eye aspect Ratio) by application of Image processing.
Third Choice	Second hand Books- a go-to destination for affordable and eco-friendly reading, connecting book lovers with a treasure trove of second-hand books waiting to find new homes. An online bookstore with a recommender on the basis of interests.
Fourth Choice	Student Management System: provides a simple interface for maintenance of student information. It can be used by educational institutes or colleges to maintainthe records of students easily. Achieving this objective is difficult using a manual system as the information is scattered, can be redundant and collecting relevant information may be very time consuming. provides facilities like online registrationand profile creation of students thus reducing paperwork and automating the record generation process in an educational institution.

Additional Remarks/ Inputs

Please tell us about any other factors that we should take into consideration (e.g., if you really would like to work on a project for some particularly convincing reason).		

2. Planning Phase:

2.1 Project Write-Up:

The focal point of this project is to create a comprehensive real estate website and web application using the MERN stack, which includes MongoDB, Express, React, and Node.js. The main objective is to offer users a seamless platform to search for properties, access detailed property information, schedule visits, curate a list of favorite properties, and enable property owners to list their properties. Our tutorial is designed to cater to both developers looking to enhance their skills and real estate enthusiasts seeking a user-friendly platform to explore and interact with property listings. Our project aims to redefine the property hunting experience by creating a user- friendly real estate platform powered by the MERN stack.

The software should be able to perform the following operations:

User Actions:

- User interacts with the User Interface (UI).
- User performs actions such as property search, view listings, register/login, manage bookings, and communicate.

System Functions:

- User Registration and Authentication processes interact with User Database for account management.
- The project interacts with the Database to fetch property information. When a new property is added, wish listed, booked after checking for availability, the database is updated accordingly.

2.2 Feasibility Report:

A comprehensive feasibility analysis is essential for assessing the viability of our real estate website and web application project. This report examines various dimensions of feasibility to ensure the successful development, deployment, and operation of the platform.

Technical Feasibility-

Technical feasibility evaluates the project's alignment with the available technology and infrastructure. In the case of our real estate platform:

Availability of Required Technologies: We have confirmed the availability and compatibility of the technologies within our chosen stack

- React
- Node.js
- MongoDB
- Auth0.

Development Expertise: Our development team possesses the necessary skills and experience to effectively implement the chosen technologies.

Scalability: The selected technology stack, including MongoDB and Node.js, is known for its scalability, ensuring that the platform can grow to accommodate increasing user demands.

From the above mentioned points it is clear that the project is technically feasible.

Economic Feasibility-

Economic feasibility focuses on the financial aspects of the project:

- Cost Considerations: We have evaluated the project budget, which includes expenses related to software licenses, hosting, development, and potential maintenance costs.
- Return on Investment (ROI): The expected benefits, including potential revenue from property listings and user engagement, justify the project's investment and indicate a positive ROI.

Resource feasibility-

Resource feasibility assesses the availability of resources, including personnel, equipment, and facilities:

- Personnel: We have a skilled and experienced development team with the necessary expertise in our chosen technology stack.
- Equipment and Tools: The hardware and software tools required for development and deployment are readily accessible and compatible.
- Facilities: We have access to the necessary facilities for project development, testing, and deployment.

Legal Feasibility

Legal feasibility evaluates the project's compliance with legal requirements, including data privacy and intellectual property:

- Data Privacy: We have implemented measures to ensure compliance with data protection regulations, safeguarding user data and privacy.
- Intellectual Property: We have reviewed and ensured that all code and assets used in the project adhere to copyright and licensing laws.

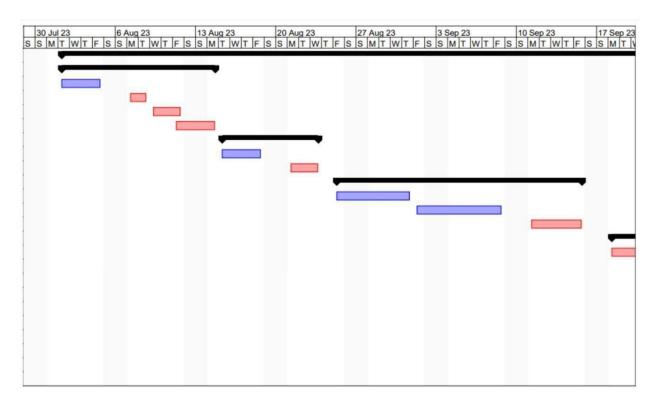
Risk Feasibility-

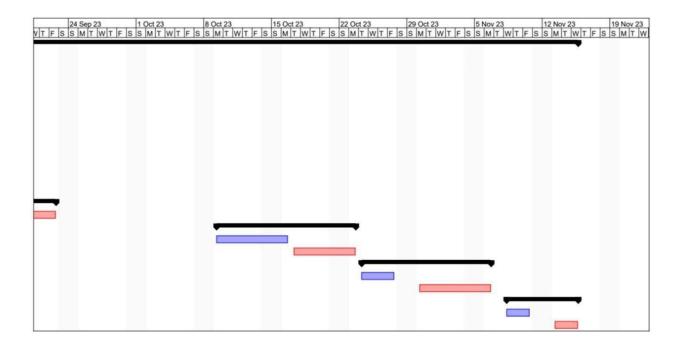
Risk feasibility assesses potential risks and strategies for risk mitigation:

- Risk Assessment: We have identified potential risks, such as technical challenges, security threats, and market competition.
- Risk Mitigation Strategies: We have developed strategies to mitigate these risks, including regular security audits, agile development practices to adapt to challenges, and a marketing plan to address competition.
- In summary, our feasibility analysis indicates that the real estate website and web application project is technically sound, economically viable, supported by adequate resources, compliant with legal requirements, and well-prepared for risk mitigation. This assessment provides confidence in the successful execution and sustainability of our real estate platform.

2.3 Gantt Chart:

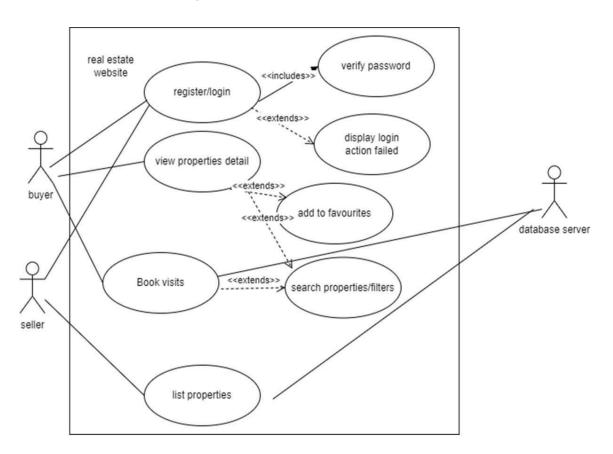
	(6)	Name	Duration	Start	Finish
1		REAL ESTATE BOOKING WEBSITE	77 days?	1/8/23 8:00 AM	15/11/23 5:00 PM
2		PLANNING	10 days?	1/8/23 8:00 AM	14/8/23 5:00 PM
3		Discussion and Project Finalization	4 days?	1/8/23 8:00 AM	4/8/23 5:00 PM
4	Ö	Estimating Scope and Effort	2 days?	5/8/23 8:00 AM	8/8/23 5:00 PM
5	Ö	Requirement Analysis and Work Division	3 days?	9/8/23 8:00 AM	11/8/23 5:00 PM
6	Ö	Setting Up Development Environment	2 days?	11/8/23 8:00 AM	14/8/23 5:00 PM
7	Ö	DESIGNING	7 days?	15/8/23 8:00 AM	23/8/23 5:00 PM
8	Ö	Designing UI and Database	4 days?	15/8/23 8:00 AM	18/8/23 5:00 PM
9	Ö	Designing UML Diagrams	3 days?	19/8/23 8:00 AM	23/8/23 5:00 PM
10	8	FRONTEND DEVELOPMENT	16 days?	25/8/23 8:00 AM	15/9/23 5:00 PM
11	7	Creating Client side and Webpages	5 days?	25/8/23 8:00 AM	31/8/23 5:00 PM
12	Ö	Adding Functionality Components	6 days?	1/9/23 8:00 AM	8/9/23 5:00 PM
13	Ö	Adding Images and Data	5 days?	9/9/23 8:00 AM	15/9/23 5:00 PM
14	Ö	DATABASE	5 days?	18/9/23 8:00 AM	22/9/23 5:00 PM
15		Setting up MongoDB Connection	5 days?	18/9/23 8:00 AM	22/9/23 5:00 PM
	Ö	BACKEND DEVELOPMENT	11 days?	9/10/23 8:00 AM	23/10/23 5:00 PM
17	Ö	Creating Server side, Routes and Schemas	6 days?	9/10/23 8:00 AM	16/10/23 5:00 PM
18	Ö	Setting up Requests, Retrieving data	5 days?	17/10/23 8:00 AM	23/10/23 5:00 PM
19	o	TESTING AND DEPLOYMENT	10 days?	24/10/23 8:00 AM	6/11/23 5:00 PM
20		Testing and fixing bugs	4 days?	24/10/23 8:00 AM	27/10/23 5:00 PM
21	Ö	Preparing for Deployment	6 days?	30/10/23 8:00 AM	6/11/23 5:00 PM
22	Ö	DELIVERY AND DOCUMENTATION	6 days?	8/11/23 8:00 AM	15/11/23 5:00 PM
23	Ö	Finalizing Documentation	3 days?	8/11/23 8:00 AM	10/11/23 5:00 PM
24	Ö	Delivery and Feedback	3 days?	13/11/23 8:00 AM	15/11/23 5:00 PM





3. Analysis Phase:

3.1 Use Case Diagram:

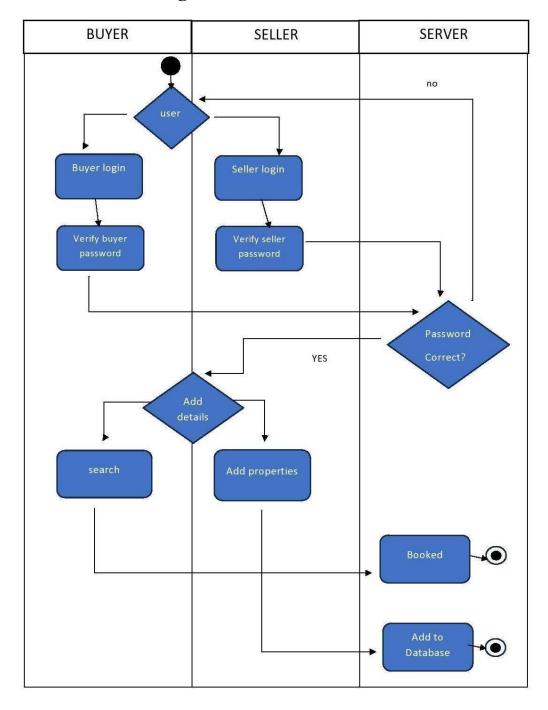


3.2 Use Case Scenario:

Use case title	Real Estate Booking
Use case id	5
Actors	User :- Buyer
Description	Client can login to the website and search for required properties using filters and book them
Pre-conditions	The user must have created a valid user account and set a password
Task Sequence	 Verify password Search properties Book properties
Post conditions	Client either logs in or if login fails then error is displayed. Either the property is available or if not then error is displayed.
Modification History	Date 10-10-2023
Authors	Ishita, Selina, Vanshika, Daksh

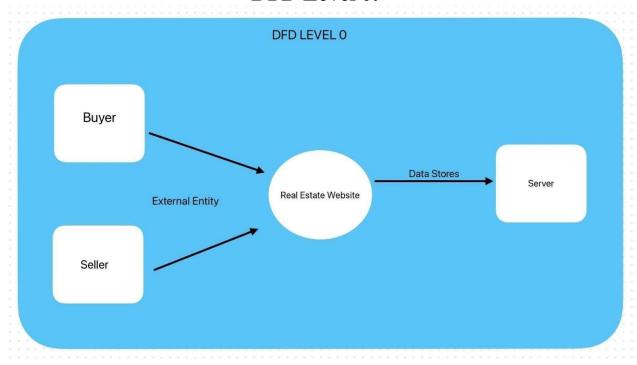
Use case title	Real Estate Selling
Use case id	6
Actors	User :- Seller
Description	Seller can login to the website and add new properties
Pre-conditions	The user must have created a valid user account and set a password
Task Sequence	Verify password
	2. Add properties
Post conditions	Seller either logs in or if login fails then error is displayed.
Modification	Date 10-10-2023
History	
Authors	Ishita, Selina, Vanshika, Daksh

3.3 Swimlane Diagram:

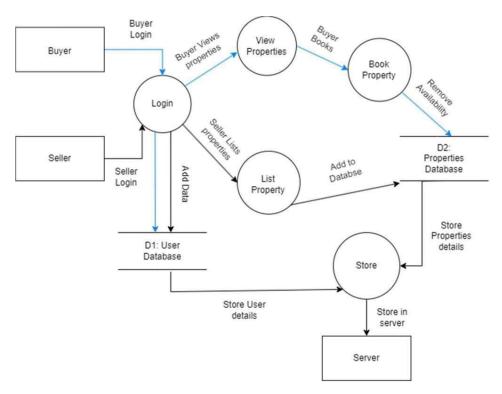


3.4 DFD Diagrams:

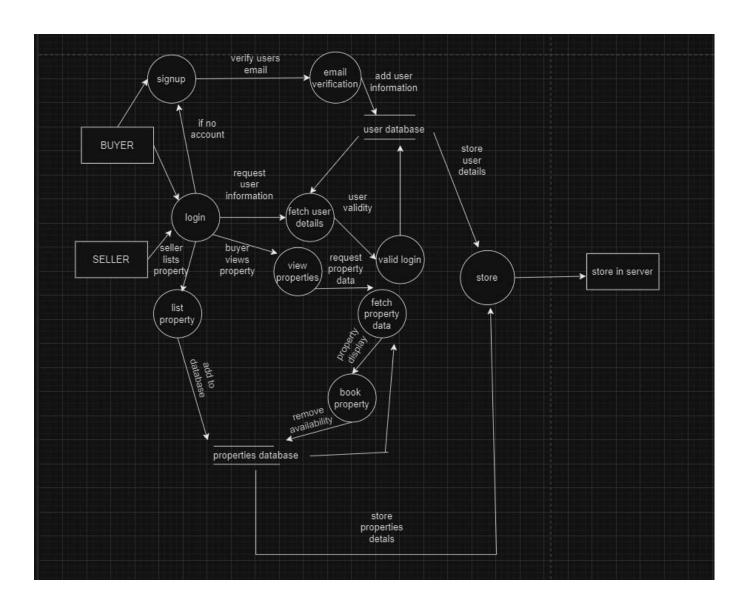
DFD Level 0:



DFD Level 1



DFD 2



A CASE STUDY IEEE FORMAT

Software Requirements Specification Document

Version 1.0

Real Estate Management Website

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1. Introduction

1.1 Purpose

The focal point of this project is to create a comprehensive real estate website and web application using the MERN stack, which includes MongoDB, Express, React, and Node.js. The main objective is to offer users a seamless platform to search for properties, access detailed property information, schedule visits, curate a list of favorite properties, and enable property owners to list their properties. Our tutorial is designed to cater to both developers looking to enhance their skills and real estate enthusiasts seeking a user-friendly platform to explore and interact with property listings. Our project aims to redefine the property hunting experience by creating a user-friendly real estate platform powered by the MERN stack.

1.2 Document Conventions

- Font Styles: Different font styles are used to distinguish various elements within the document:
- **Bold Text:** Bold text is primarily used for section headings and subheadings, making it easy for readers to identify the document's structure.
- Italic Text: Italics are used for emphasizing specific terms or for highlighting variables, placeholders, or user inputs. For instance, "User enters the username and password."
- **Numbering and Section Structure:** The document is organized using a hierarchical numbering system for sections and subsections. Each section and subsection is assigned a unique number, such as "1. Introduction" or "2.1 Product Perspective." This numbering system helps readers navigate through the document's structure.
- **Priority Notation:** Requirements within the document may include priority notations to indicate the relative importance of each requirement. Priorities are typically assigned as follows:
- **High Priority (HP):** Indicates requirements that are critical to the core functionality or safety of the software.
- **Medium Priority (MP):** Denotes requirements that are important but not critical, providing enhancements or improved user experience.
- Low Priority (LP): Represents requirements that, while desirable, are not essential and may be considered for future enhancements.
- Quotations: When citing external references, standards, or source code snippets, they are presented within quotation marks and may include citations or source information for clarity and proper attribution.
- **Lists:** Bulleted lists are used to present items in an easily digestible format, often for listing features, specifications, or points.
- **Tables:** Tables are employed to present structured data, such as lists of requirements, specifications, or reference information. They provide a clear and organized way to present tabular data.

Acronyms and Abbreviations: Acronyms and abbreviations are spelled out upon their first occurrence in the
document, followed by the acronym or abbreviation in parentheses. For example, "Software Requirements
Specification (SRS)".

By following these document conventions, we aim to enhance the readability and understanding of this SRS. These conventions also provide a consistent structure that facilitates communication among stakeholders and ensures that the requirements and specifications are clearly defined and easily accessible.

1.3 Intended Audience and Reading Suggestions

- **Developers:** Developers involved in designing, coding, and implementing the real estate website and web application will find this document highly valuable. They should start by reading the entire document to gain a comprehensive understanding of the project's scope, requirements, and technologies involved. However, developers may pay particular attention to the "Technical Requirements" section for in-depth technical specifications.
- **Project Managers:** Project managers responsible for overseeing the development process can benefit from reading the entire document to grasp the project's scope, objectives, and technical aspects. Pay close attention to the "Project Scope" and "Key Objectives" sections to understand the project's goals and deliverables.
- Marketing Staff: Marketing staff involved in promoting the real estate platform may start by reading the "Introduction" section and then focus on the "Product Scope" section to understand the platform's features and user benefits. This will help them create effective marketing strategies.
- Users: End-users of the real estate website and web application can get a clear picture of what to expect from the platform by reading the "Introduction" and "Product Scope" sections. These sections outline the platform's purpose and key functionalities from a user perspective.
- **Testers:** Testers responsible for quality assurance and testing activities should read the entire document to understand the project's requirements thoroughly. Pay special attention to the "Functional Requirements" section, as it outlines the expected behavior of the platform.
- **Documentation Writers:** Writers tasked with creating user manuals, help guides, or documentation related to the real estate platform should read the entire document to gain insights into the platform's functionalities and technical specifications. This knowledge will be crucial for creating informative and user-friendly documentation.

• Suggested Reading Sequence:

- Overview Sections: All readers should start with the "Introduction" and "Product Scope" sections to understand the project's purpose and objectives.
- **Technical Team (Developers and Testers):** After the overview sections, developers and testers should delve into the "Technical Requirements" and "Functional Requirements" sections to understand the technical and functional aspects of the platform.
- **Project Managers:** Project managers can proceed to the "Project Scope" and "Key Objectives" sections to gain a deeper understanding of the project's scope and goals.
- Marketing Staff: Marketing staff may focus on the "Product Scope" section for insights into the

platform's features and benefits that can be highlighted in marketing materials.

- Users: End-users should read the "Introduction" and "Product Scope" sections to understand what the platform offers and how it can benefit them.
- **Documentation Writers:** Writers tasked with creating documentation can refer to the entire document to gather information about the platform's functionalities and technical details that need to be included in user manuals or help guides.

This suggested reading sequence ensures that each reader type can focus on the sections most pertinent to their roles and responsibilities while gaining a comprehensive understanding of the project as a whole.

1.4 Product Scope

Key Objectives:

- Streamlined Property Search: Our project aims to provide users with a user-friendly and efficient property search experience. Users can search for properties by title, city, or country, allowing them to quickly narrow down their options and find the properties that match their criteria.
- Comprehensive Property Details: We believe that informed decisions are the best decisions. To this end, our platform offers users access to comprehensive property details, including property descriptions, addresses, and high-quality images. Users can make well-informed choices based on the information provided.
- Effortless Visit Scheduling: Scheduling property visits is made hassle-free with our platform. Users can book visits to properties they are interested in, ensuring a smooth and convenient process for both property seekers and sellers.
- Personalized Favorites: We understand that users often have a collection of preferred properties. With our
 platform, users can curate a list of their favorite properties, making it easy to revisit and consider their top
 choices.
- **Property Listing for Owners:** Property owners have the opportunity to list their properties on our platform, expanding their reach to potential buyers or renters. We've made the listing process straightforward, ensuring that property owners can showcase their offerings effortlessly.

1.5 References

- https://react.dev/
- https://nodejs.org/en
- https://www.mongodb.com/
- https://blog.nextideatech.com/how-to-get-started-with-the-mern-stack-a-comprehensive-guide/

2. Overall Description

2.1 Product Perspective

This product's origin lies in addressing the growing demand for a user-friendly and efficient online platform, catering to property seekers and owners alike. Being a standalone product, It aims to be a central hub, simplifying property browsing, visit bookings, and listings, streamlining the rental process.

2.2 Product Functions

User Actions:

- User interacts with the User Interface (UI).
- User performs actions such as property search, view listings, register/login, manage bookings, and communicate.

System Functions:

- User Registration and Authentication processes interact with User Database for account management.
- The project interacts with the Database to fetch property information. When a new property is added, wish listed, booked after checking for availability, the database is updated accordingly.

2.3 User Classes and Characteristics

Property Seekers:

- Most important users who visit the platform to search for properties.
- Varied technical expertise, ranging from tech-savvy individuals to those with limited technical skills.
- May have different educational backgrounds and property rental experience.
- Importance: Primary user class as they drive property discovery and bookings.

Property Owners:

- Individuals or organizations who list their properties on the platform.
- May range from experienced property managers to first-time property listers.
- Importance: Critical for maintaining a robust inventory of properties.

Administrators:

- Platform administrators responsible for managing user accounts, content, and system maintenance.
- Require in-depth technical expertise and security privileges.
- Importance: Crucial for system maintenance, data security, and user support.

2.4 Operating Environment

The product and the code has been developed on VSCode using JavaScript, React, Node.js and frameworks like prisma. Besides the local environment, the database has been setup on MongoDB Cloud. We aim to make our product responsive hence it will be accessible by any operating system on both computers and phones.

2.5 Design and Implementation Constraints And Dependencies

- **Design:** Focusing on Frontend Web development the project uses favicons, google fonts, templates, and different styling elements to make the UI more appealing. Any changes in the availability of these services may cause changes to the project.
- **Technology Stack:** The project has been developed using specific technologies, including JavaScript, React, Prisma, Node.js, and MongoDB.

These technologies are central to the project's architecture, and significant changes to the technology stack would require substantial redevelopment and may not align with project timelines and resource availability.

3 Specific Requirements

3.1 External Interface Requirements

User Interfaces

The user interface for the real estate website is designed to be user-friendly, intuitive, and visually appealing.

User Login/Registration:

- **Login Screen:** Users are presented with a login screen where they can enter their credentials to access their accounts.
- **Registration Screen:** New users can register for an account by providing necessary information.

Property Browsing:

- Search Interface: The property browsing interface allows users to search for properties as per location
- **Property Listings:** Search results are displayed as property listings, each showcasing property images, descriptions, pricing, and availability.
- **Property Details:** Clicking on a property listing provides users with detailed information about the property, including additional photos, amenities, and contact options.

Booking Property Visits:

• **Booking button:** Users interested in visiting a property can initiate the booking process by filling out a form or pressing the confirm booking button.

Liking Properties:

• **Like/Save Button:** Users can like or save properties they are interested in by clicking a "Like" or "Save" button on the property listing. Liked properties are stored in the user's account for future reference.

Adding Location Details:

• **Location Input:** Property owners can input location details when listing their properties, including address, coordinates, and additional location information.

Hardware Interfaces

The project code was developed on a laptop, and while this hardware is used during development and testing, the software itself is designed to be compatible with a wide range of devices, including desktop computers, laptops, tablets, and smartphones.

Software Interfaces

Frontend Components (React):

• **Description:** The frontend of the software is built using React, which includes various components like map integration, user authentication through Auth0, CSS for styling, and the inclusion of external resources like Google Fonts and images to make the UI more appealing.

Backend (Node.js):

• **Description:** The backend of the software is built using Node.js and serves as an intermediary between the frontend and the database.

Database (MongoDB Cluster):

• **Description:** The software interacts with a MongoDB database hosted on a cluster to store and retrieve property and user data.

VS Code with ThunderClient:

• **Description:** ThunderClient is an extension for VS Code used for testing API endpoints and interacting with the backend during development and testing.

External Services (Auth0, Maps):

• **Description:** The software integrates with external services such as Auth0 for user authentication and maps services for property location display.

Operating System (Cross-Compatible):

• **Description:** The software is designed to be cross-compatible with various operating systems, including Windows, macOS, and Linux.

Web Browsers (Cross-Compatible):

• **Description:** The software is accessible via common web browsers, including Google Chrome, Mozilla Firefox, Apple Safari, and Microsoft Edge.

3.2 Functional Requirements

3.2.1 functional requirements for dashboard

purpose	This screen thus provides information related to the properties available ,location,and contact details
inputs	The customer can view a page of information by choosing from one of the options given on the dashboard. Selection is performed with a simple keypad.
processing	The menu responds to selections by displaying a page containing the pre-defined text requested information
outputs	Output consists of a screen of information related to the properties, favourite, user account , contact page

Table 1: Functional Requirements for dashboard

3.2.2 functional requirements for add property

purpose	This screen provides information specific to the seller/properties	
inputs	Seller can add the property details such as location, price, image etc	
processing	The menu responds to selections by displaying a page containing the pre-defined text requested information.	
outputs	Output consists of a screen of information with successful addition of property	

Table 2: Functional Requirements for add property

3.2.3 functional properties for booking

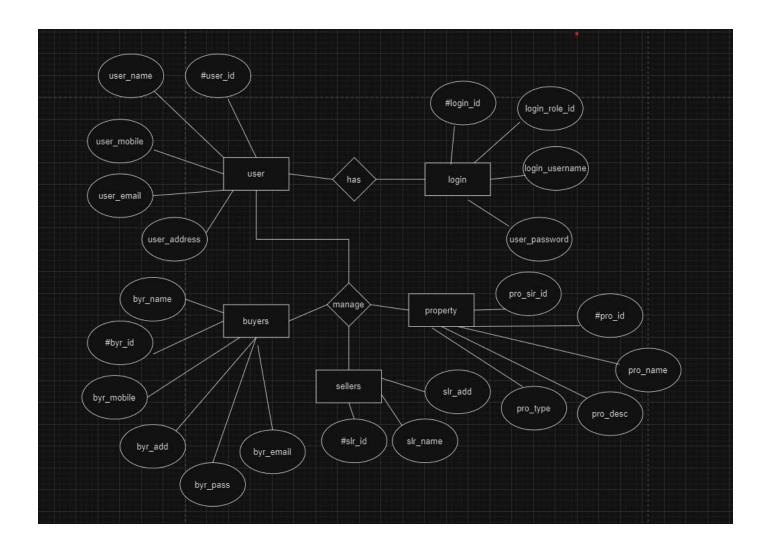
purpose	This screen provides information specific to the Buyer/properties	
inputs	Buyer can search/filter property details such as location,price,image etc	
processing	The menu responds to selections by displaying a page containing the pre-defined text requested information.	
outputs	Output consists of a screen of information with successful booking	

Table 3: Functional Requirements for booking

3.3 Performance Requirements

- Software is designed for all laptop and mobile screens
- The software will support simultaneous user access(UA) as per the server capacity.
- Can book visits but not purchase ,no payment gateway

3.4 Logical Database Requirements



3.4 Quality Attributes

Usability:

- **Requirement:** The user interface (UI) must achieve a usability rating of at least 80 out of 100 on standardized usability testing, as measured by user satisfaction, efficiency, and learnability metrics.
- **Verification:** Conduct usability testing with representative users and measure their satisfaction, task completion time, and error rates.

Reliability:

- **Requirement:** The application shall have an uptime of at least 99.9% during peak usage hours.
- Verification: Monitor application uptime using automated tools and real-time performance monitoring.

Performance:

- **Requirement:** The application shall load property listings and details pages within an average of 2 seconds, regardless of the user's location.
- Verification: Conduct performance testing with simulated users from different geographical locations

Security:

- score of at least 90% in vulnerability detection and mitigation.
- **Verification:** Conduct periodic security assessments and penetration tests, documenting vulnerabilities found and actions taken to address them.

Interoperability:

- **Requirement:** The application shall be compatible with the latest versions of commonly used web browsers (e.g., Chrome, Firefox, Safari) and responsive across various devices (desktop, tablet, mobile).
- **Verification:** Conduct cross-browser and cross-device testing to ensure compatibility.

Portability:

- **Requirement:** The application must be deployable on multiple cloud platforms (e.g., AWS, Azure, Google Cloud) with minimal adjustments.
- **Verification:** Test and document the deployment process on different cloud platforms, noting any platform-specific configurations required.

3. Change History

200209	Version 1.0 – Initial Release

4. Document Approvers

SRS for C Real Estate Mangement System approved by: Name: Paluck

Arora

Designation: Teaching Assistant, Thapar Institute of Engineering and Technology

Date:29-11-23

#001

USER LOGIN PAGE

As Buyer or Seller I want to login to be able to access the dashboard

LOGIN SYSTEM

Users email address In valid format	Registered Email:	
User unique password	Password:	

Authenticate the Corresponding mail &

Password in the database.

Confirmation

Success: valid user logged in and referred to the dashboard.

Failure: Display Error message

A. Email Address in wrong format.

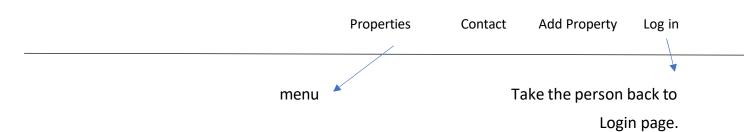
B. Incorrect Password, please try again.

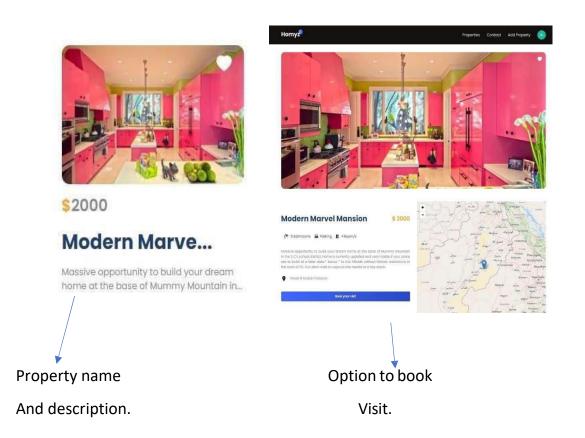
C. Service Unavailable, please try again.

#002

DASHBOARD

As a Buyer I want to access different properties and book visit.





Confirmation

Success:

- A. Successfully Redirecting to the selected property page for further booking details.
- B. Successfully Logging out of the dashboard.

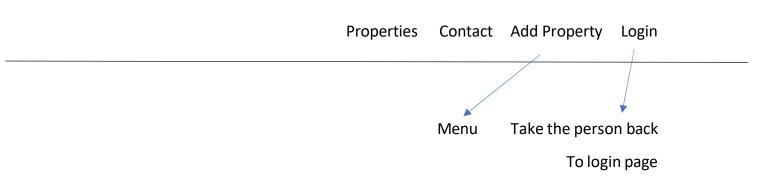
Failure:

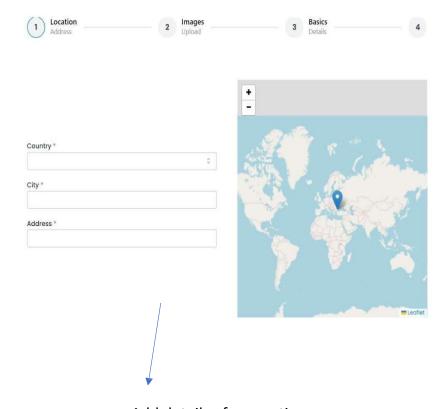
- A. Unable to logout to the original login page
- B. Property unavailable.
- C. Redirected to the wrong property page.

#003

As a Seller I want to add my property

DASHBOARD





Add details of properties

Confirmation

Success:

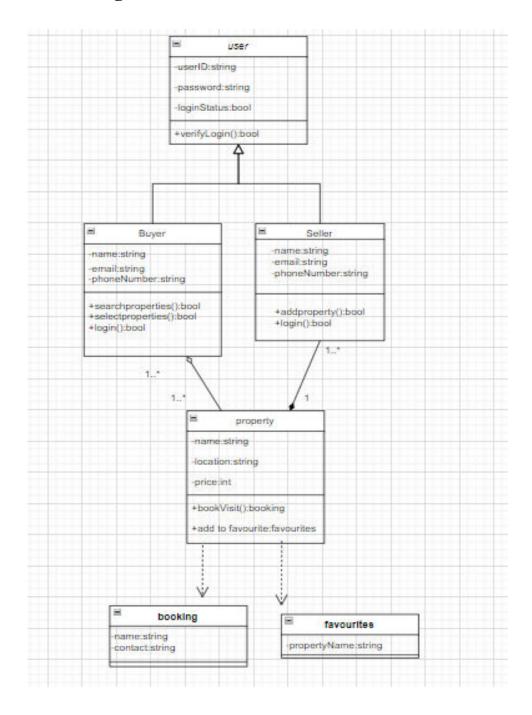
- A. Successfully adding all details to add properties.
- B. Successfully Logging out of the dashboard.

Failure:

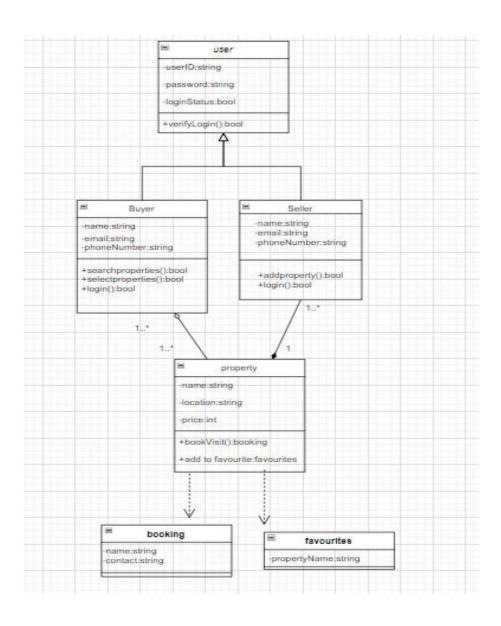
- A. Unable to logout to the original login page.
- B. Unable to add properties.

4. Design Phase:

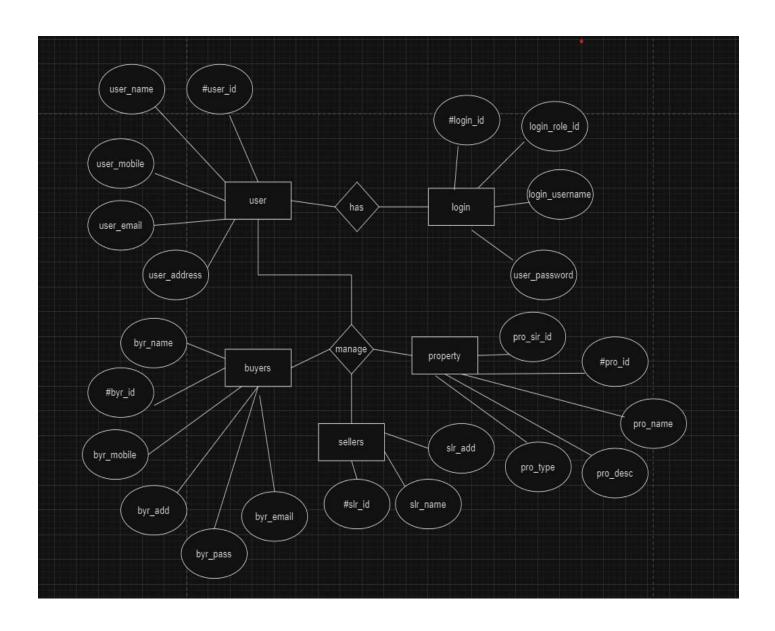
Class Diagram



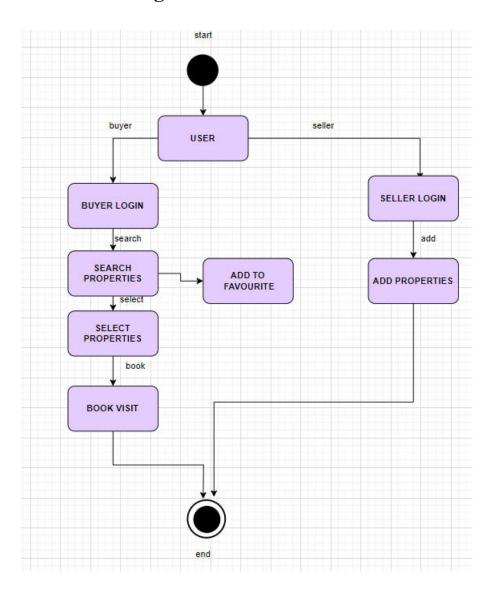
Object Diagram



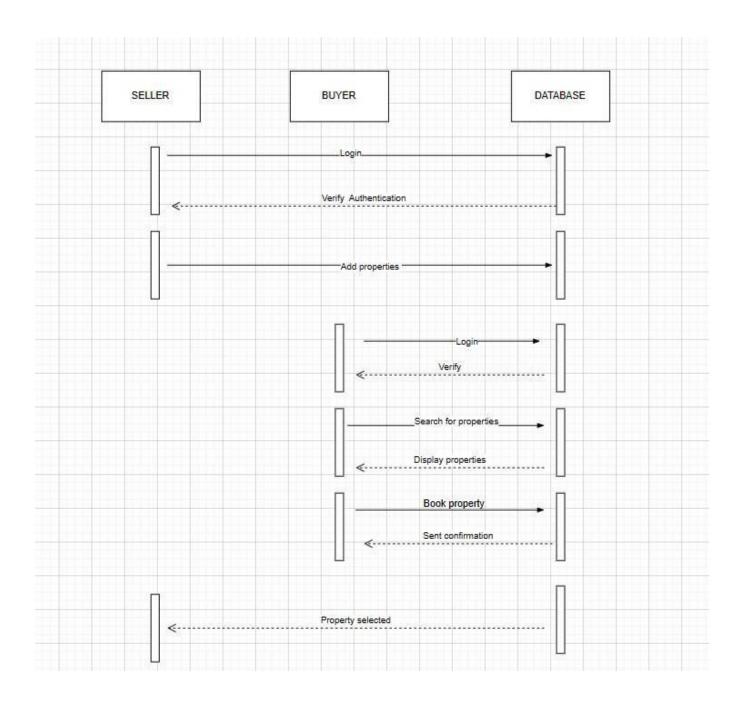
ER Diagram



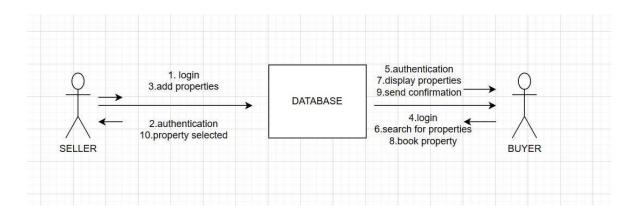
State chart diagram



Sequence diagram

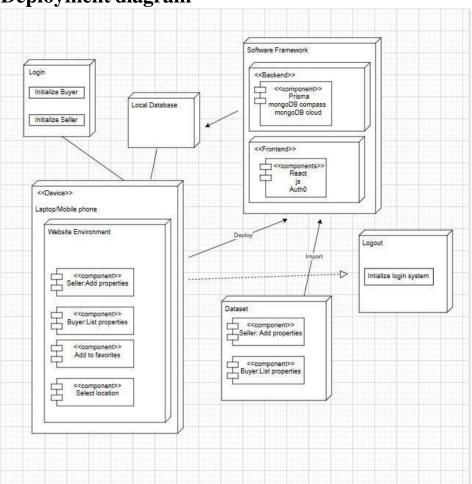


Collaboration diagram

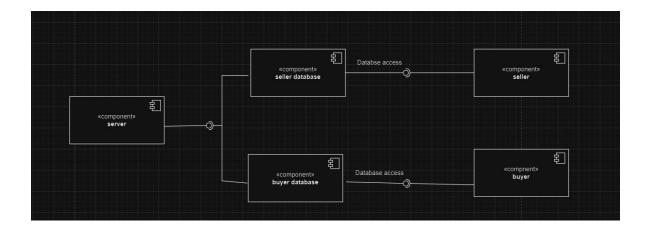


5. Implementation

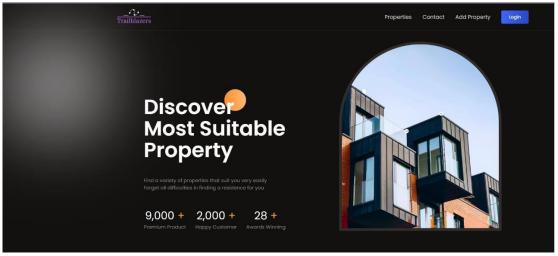
Deployment diagram

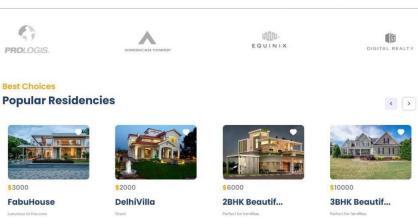


Component diagram

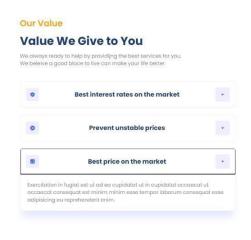


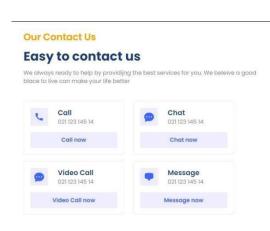
Screenshots of working project 1)Dashboard





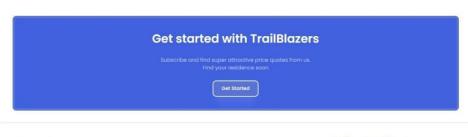












Trailblazers

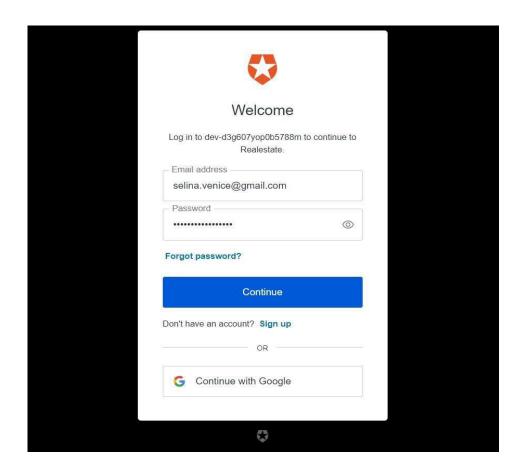
Made by Team Trailablazers - Daksh,Ishita,Selina,Vanshika under the supervision of Miss Paluck

Information

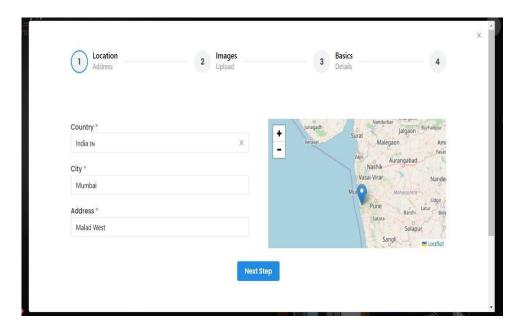
Thapar Institute Students

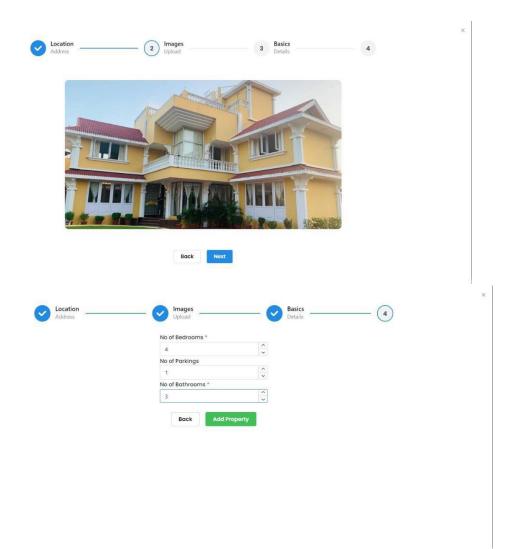
Property Services Product About Us

2)Login

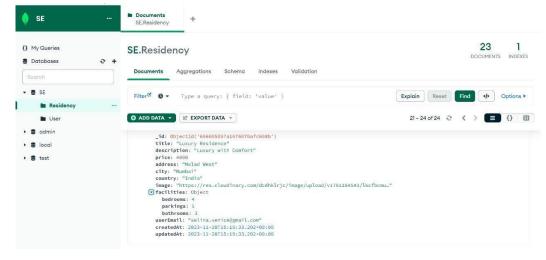


3)add property

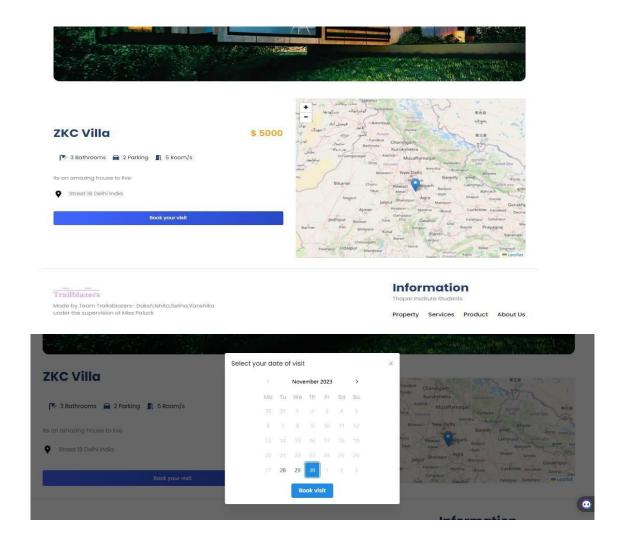




4)database



5)Booking page



Test Cases and Test Reports

Test Case 1: User property login details

Test Case#: 1	Page 1 of 4

Login

Designed By:

Daksh Kumar Nahar (102103481) Subsystem: User Validation

Ishita Suchdeva (102103493) Selina Varshney (102103496)

Design Date: 19/09/2023

Vanshika Narang (102103510)

Execution Date:29/09/2023

Executed By:

Daksh Kumar Nahar (102103481) Ishita Suchdeva (102103493) Selina Varshney (102103496) Vanshika Narang (102103510)

Short description: Testing of the Sign-Up

and Login forms

Pre-Conditions:

User should enter a valid thapar.edu email address

Step	Action	Expected System Response	Pass/Fail	Comments
1.	Enter Username			
2.	Enter Password			
3.	Press sign up	Successfully signed up	pass	
4.	Check post condition 1		pass	

Post-Conditions:

 An error message "Incomplete Credentials" is displayed, asking the user to complete the sign-up form.

Conclusion: The sign-up and login functionality is executing successfully

Test Case 2: User property details by Seller

Test Case#: 2 Page 2 of 4

System: Real Estate Management System Test Case Name: property details

Designed By: Subsystem: enter details

Daksh Kumar Nahar (102103481)
Ishita Suchdeva (102103493)

Design Date: 12/10/20

Vanshika Narang (102103510) Execution Date: 25/10/2023

Executed By:

Daksh Kumar Nahar (102103481) Ishita Suchdeva (102103493) Selina Varshney (102103496) Vanshika Narang (102103510)

Selina Varshney (102103496)

Short description: details and description of

property

Pre-Conditions:

details value should not be left empty

Step	Action	Expected System Response	Pass/Fail	Comments
1.	Click on Add property			
2.	Enter the details			
3.	Upload the image		pass	
4.	Submit the form	Property details added in "property" log	pass	property added

Post-Conditions:

• Shows the image of the property that has been uploaded and adds it to the property page.

Conclusion: The add property functionality is executing successfully

Test Case 3: User views all property

Test Case#: 3 Page 3 of 4

System: Real Estate Management System Test Case Name: Search property

Designed By: Subsystem: add to cart

Daksh Kumar Nahar (102103481)
Ishita Suchdeva (102103493)

Design Date: 10/11/2023

Selina Varshney (102103496)
Vanshika Narang (102103510) **Execution Date:** 20/11/2023

Executed By:

Daksh Kumar Nahar (102103481) Ishita Suchdeva (102103493) Selina Varshney (102103496) Vanshika Narang (102103510)

Short description: View all property posted by

Sellers

Pre-Conditions:

• There should be at least one property

Step	Action	Expected System Response	Pass/ Fail	Comments
1.	Click on property	Shows the list of all properties	pass	

Post-Conditions:

All property displayed

Conclusion: The view property functionality is executing successfully