

# IN PARTNERSHIP WITH PLYMOUTH UNIVERSITY

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Programme: BSc (Hons) Software Engineering – Plymouth University.	
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**UNIVERSITY OF  
PLYMOUTH**

**PUSL3122**  
**HCI, Computer Graphics, and**  
**Visualization**

**Coursework Report**  
**Group 42**

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Finally, we would like to acknowledge our peers, lecturers, and the university for providing an environment that fosters learning, growth, and innovation.

## Abstract

Furniture Hub is a desktop-based interior design application that enables users to visualize and customize room layouts using both 2D and 3D furniture models. The application has a user-friendly design and includes features like user identification, interactive dashboards, and immersive viewing experiences for particular furniture items. Users can browse a library of room kinds, upload backdrop photographs of their own spaces, and customize furniture colors based on their style preferences. Furniture Hub allows for basic space customization and visualization without the need for extensive design abilities. Although the system does not currently support furniture scaling, rotation, or design saving, it does provide essential visualization functions. The app lays the groundwork for future improvements to interior design simulation tools, particularly for home users, students, and aspiring designers looking for easy-to-use digital furniture planning solutions.

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## Roles and Responsibilities

Student Name	Student ID	Role	Responsibility
Jayakody Jayakody	10899554	Frontend Developer	Responsible for implementing the user interface and ensuring that users interact with the online application seamlessly.
Panadura Premathilaka	10899668	UI/UX Designer	Responsible for developing the visual layout, color palettes, and overall aesthetic to provide a user-friendly and appealing design.
Ranasinghe Perera	10899656	Backend Developer	Responsible for server-side logic, API endpoints, and to administer the system's basic operation.
Yaddehige Amarasinghe	10899158	Backend Developer	Responsible for server-side logic, API endpoints, and database integration to administer the system's basic operation.
Dewasinghe Dayoda	10898439	Project Manager	Responsible for Oversees overall management of the project, supervises team tasks, and ensures a successfully product at the end.

## Project Links

- GitHub Repository (Source Code) Link – [PUSL-3122-HCI-Computer-Graphics-and-Visualization-Group 42](#)
- YouTube Video Presentation Link - <https://youtu.be/WqSdHPXWyM4>

# 1. Introduction

The Furniture Hub is a desktop application that enables users to design interior spaces by visualizing and selecting 2D and 3D furniture models, browsing products, exploring layouts, and customizing visual presentations, making furniture selection and placement easier.

## 1.1. Application Features

The Furniture Hub has several key characteristics, including:

- **User Authentication:** Login and Sign-Up using username, email, and password.
- **Furniture visualization:**
  - 2D Mode: View 2D furniture designs as clear static images.
  - 3D Mode: Explore 3D models with 360-degree interactivity.
- **Interior Room Simulation:** Supports backdrop uploads and furniture colour adjustment.
- **Gallery Navigation:** Showcases sample room categories (bedroom, living room, kitchen, and dining room) for furniture selection.
- **User Dashboard:** Centralized navigation includes Dashboard, About, Gallery, and user profile.

## 1.2. Functional and Non-Functional Requirements

### 1. Functional Requirements

FR1	User registration and login system.
FR2	Display 2D and 3D furniture models.
FR3	Furniture Selection and Viewing
FR4	Interior room customization (background change, color choice)
FR5	Gallery-based room selection.
FR6	Navigating the Dashboard and Feature Pages

*Table 1. Functional Requirements.*

### 2. Non-Functional Requirements

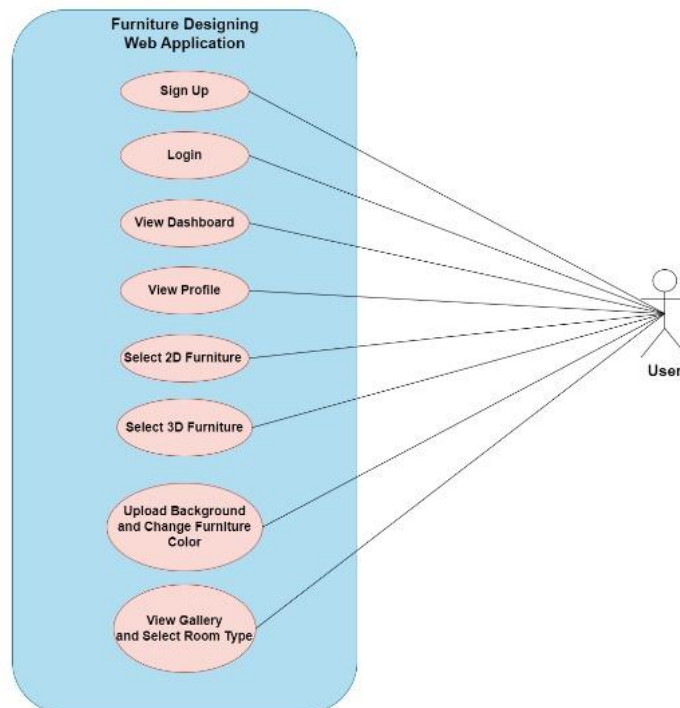
NFR1	Usability	Easily navigable interface
NFR2	Reliability	Stable loading and transitions between views.
NFR3	Performance	Minimum loading time for 2D/3D models.
NFR4	Portability	Desktop compatibility for mainstream operating systems.
NFR5	Scalability	Can be expanded to include additional furniture types.

*Table 2. Non-Functional Requirements*



### 1.3. Paper-based prototype

Below are the diagrams made for Furniture Hub.



#### Assumptions

##### User Authentication:

Users are required to register using a unique username, working email address, and password. To use the features of the program, you must have valid login credentials.

##### Display of Furniture:

The system comes packed with picture files for every piece of 2D and 3D furniture. A unique furniture image (2D or 360° for 3D) is correlated with each furniture button.

##### Customization of Interior Rooms:

Background images (like pictures of rooms) in supported image formats (like JPG and PNG) can be uploaded by users.

Furniture color may be changed by users using preset settings or a color picker.

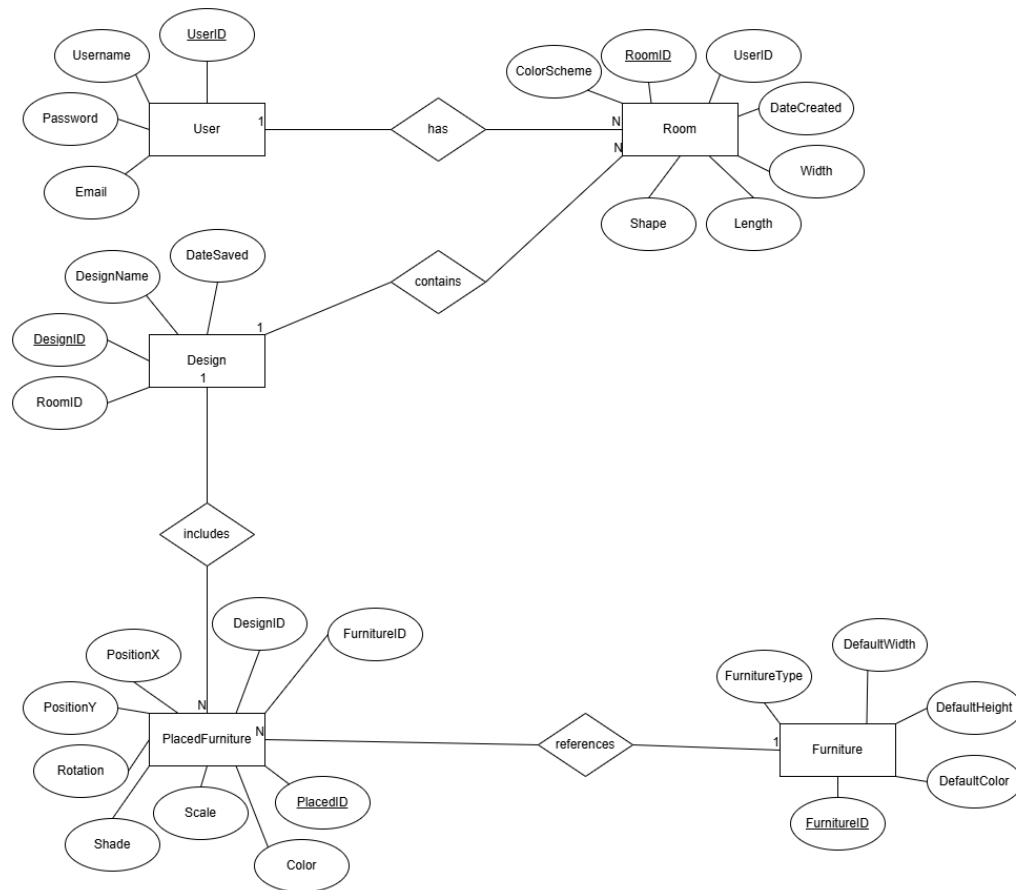
##### Navigating the Gallery:

The gallery has carefully chosen furnishings for each of the pre-established room types.

##### Navigation on the Dashboard:

The dashboard is the main navigation center for all of the main features (2D/3D views, interior room, gallery).

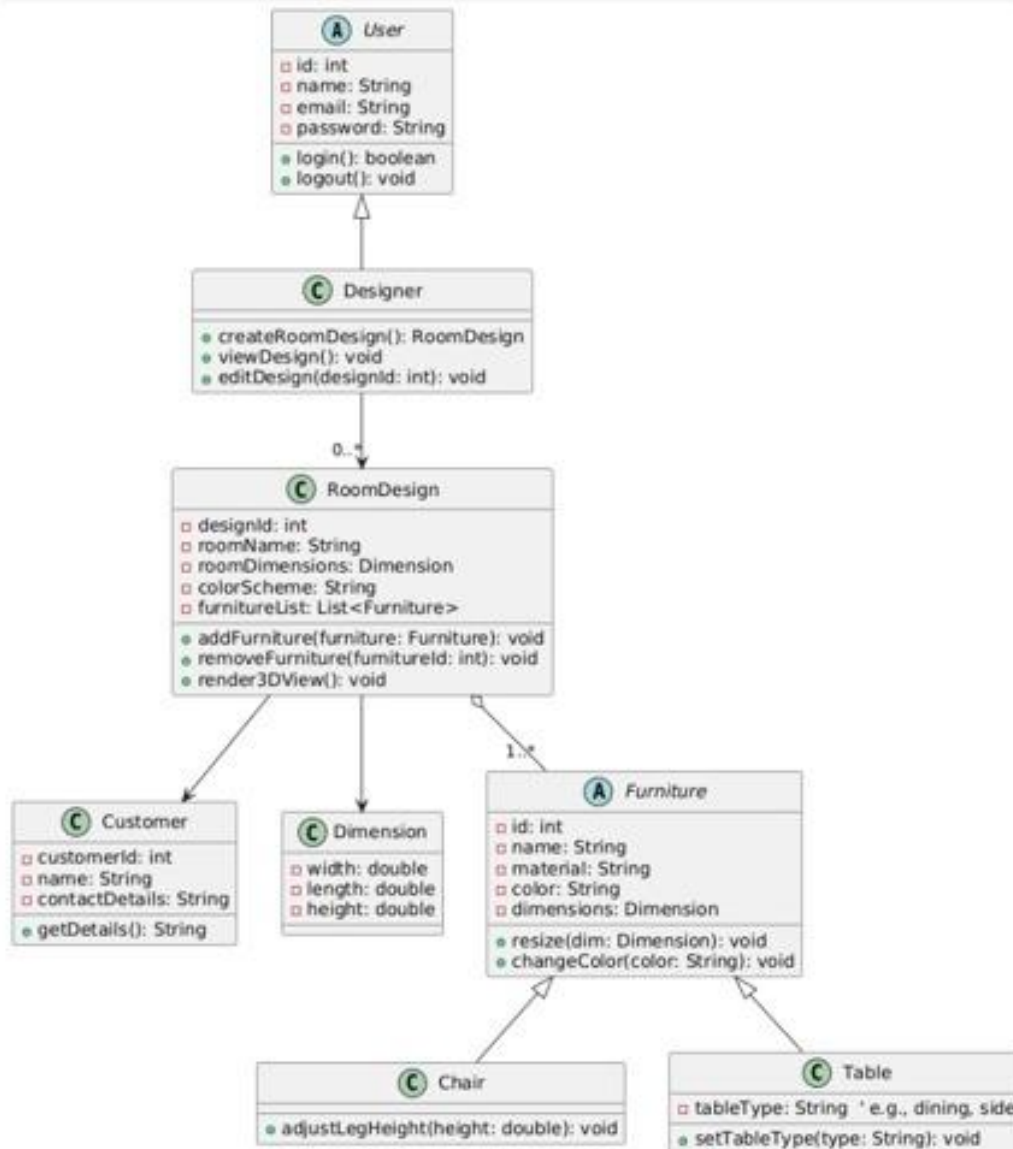
*Figure 1. Use case Diagram*



#### Assumptions

- A User can create multiple Rooms (N relationship "has" between User and Room).
- A Room contains one Design (1:1 relationship "contains" between Room and Design).
- A Design includes multiple PlacedFurniture items (1 relationship "includes" between Design and PlacedFurniture).
- Each PlacedFurniture references exactly one Furniture item (N:1 relationship "references" between PlacedFurniture and Furniture).
- Each entity has a unique identifier (UserID, RoomID, DesignID, FurnitureID, PlacedID).
- Users are authenticated with username/password and can be contacted via email.
- Rooms have physical properties (width, length, shape) and design properties (color scheme).
- Designs are time-stamped with DateSaved.
- PlacedFurniture has positioning data (PositionX, PositionY, Rotation, Scale) and appearance properties (Color, Shade).
- Furniture has default properties (DefaultWidth, DefaultHeight, DefaultColor) that can be customized when placed.
- The system appears to be for interior design or room planning purposes.
- The RoomID appears in both Room and Design entities, suggesting Room is the parent entity.
- A Design belongs to exactly one Room.
- Each piece of PlacedFurniture belongs to exactly one Design.

Figure 2. ER Diagram.



#### Assumptions:

- Only Designers (not Customers) can create or modify Room Designs
- Each Room Design must contain at least one piece of Furniture
- Furniture can only exist within the context of a Room Design
- Chairs and Tables are specialized types of Furniture

Figure 3. Class Diagram.

Initial prototype was created utilizing hand-drawn sketches.

The sketch shows a login page for 'Furniture Hub'. On the left, the logo 'Furniture Hub' is displayed with the tagline 'Design Your Perfect Space' below it. On the right, the text 'Welcome Back' is followed by 'Login to your account.'. Below this are two input fields: 'Email.' and 'Password.'. A 'Login' button is positioned below the password field. At the bottom right, there is a link that says 'Don't have an account? sign up.'.

Figure 4. Login page

The sketch shows a dashboard for 'Furniture Hub'. On the left is a sidebar with the logo 'Furniture Hub' and three menu items: 'Dashboard', 'About', and 'Gallery'. The main content area has a header with 'Welcome to Furniture Hub.' and 'Today is 2025-05-01'. In the top right corner, there is a user profile icon labeled 'user'. Below the header, the text 'Your Furniture Design Hub.' is centered. There are two main content boxes: 'Furniture View' with the description 'Explore and customize individual.' and an 'Open furniture View' button; and 'Interior Room' with the description 'Design and visualization completed interior' and an 'Open Interior Room' button. At the bottom of the main content area is a large rectangular box labeled 'Image.'.

Figure 5. Dashboard

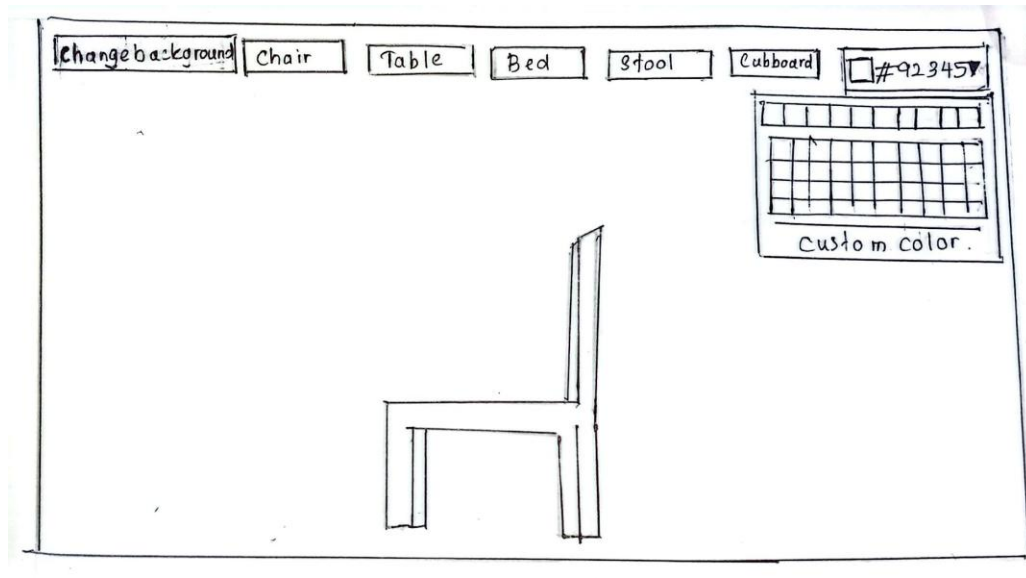


Figure 6. Room Design Page

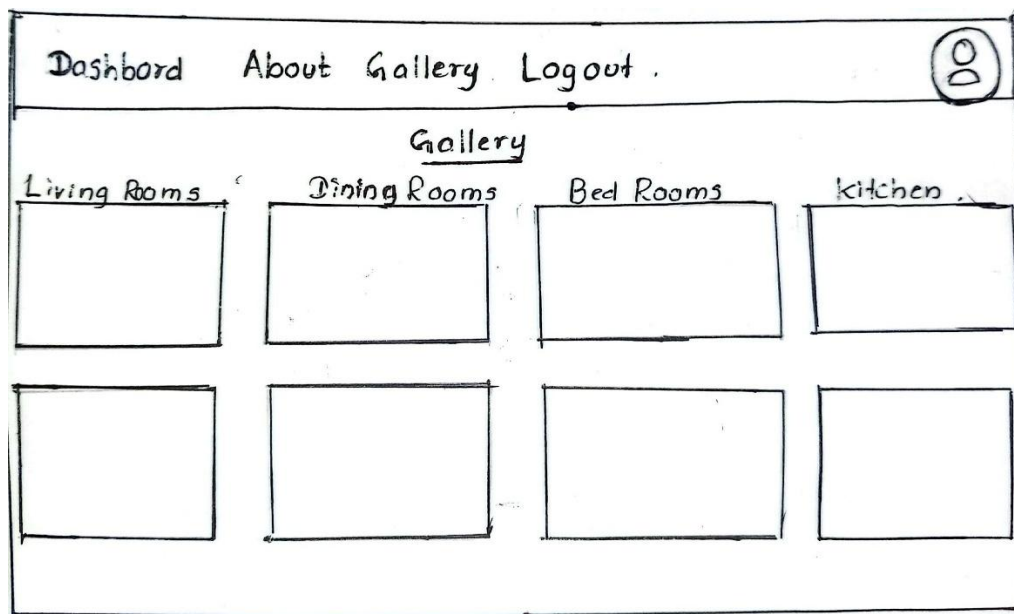


Figure 7. Gallery page

## 1.4. Bringing Requirements to Life

### Persona 1:

Name: Michael Jones

Age: 27

Occupation: New Homeowner

Scenario: Michael is designing his living room in his new home. He uploads a snapshot of his room to the Furniture Hub, tests out various 3D furniture, alters the colors, and matches them to his wall paint.

*Figure 8. Persona 01.*

### Persona 2:

Name: Lisa Parker

Age: 32

Occupation: Interior Designer

Scenario: Lisa explores both 2D and 3D models to better comprehend design concepts for her tasks. She appreciates being able to see furnishings from different angles.

*Figure 9. Persona 02.*

## 1.5. Storyboards



Figure 10. Storyboard 01

### Storyboard 01: Secure Access Workflow

The Secure Access Workflow for the Furniture Desktop Application outlines the user authentication process, starting with launching the application and requiring username and password. If incorrect credentials are entered, an error message prompts retrying or recovering the account. This workflow ensures a secure entry point for authorized users.

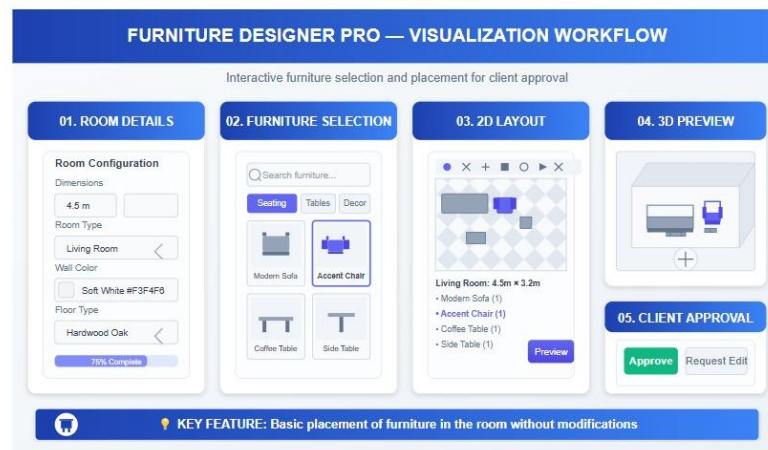


Figure 11. Storyboard 02

### Storyboard 02: Visualization Workflow

The Visualization Workflow enables users to explore furniture items in a 3D interactive environment. Users navigate to the product catalog from the dashboard, select a furniture item, and enter a visualization mode where they can rotate, zoom, and view the item from different angles or simulated room settings. The workflow includes options to adjust lighting or textures to better visualize the furniture in context, enhancing decision-making before purchase (Batch *et al.*, 2024).





Figure 12. Storyboard 03

### Storyboard 03: Customization Workflow

The Customization Workflow allows users to personalize furniture items. From the product page, users select a furniture piece and access a customization panel to modify attributes such as color, material, or dimensions. The workflow includes real-time previews of changes and a summary of selections before saving or adding the customized item to the cart. This process ensures users can tailor products to their preferences efficiently ('Interaction Design 6th Ed', no date).

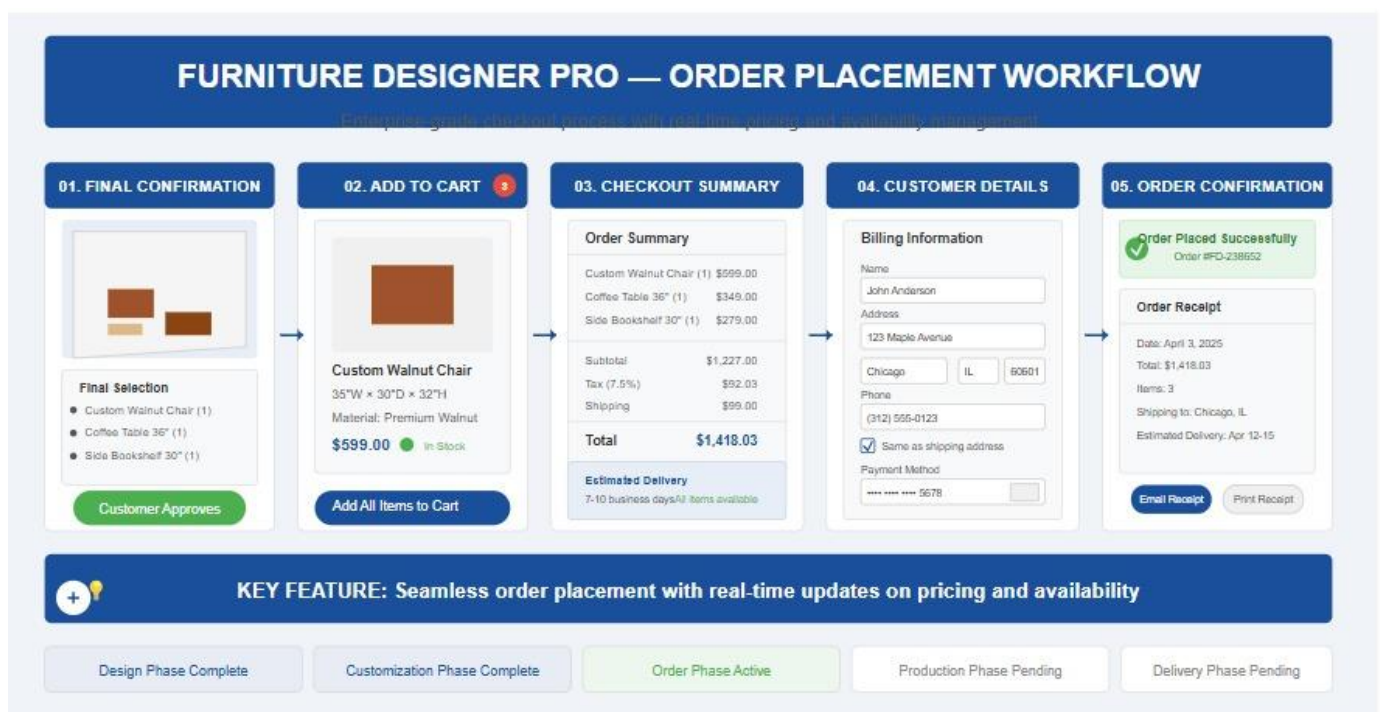


Figure 13. Storyboard 04



### **Storyboard 04: Order Placement Workflow**

The Order Placement Workflow guides users through purchasing their selected or customized furniture. From the cart, users review their items, enter shipping and payment details, and confirm the order. The workflow includes validation checks (e.g., for incomplete fields) and a final order summary before submission. Post-purchase, users receive confirmation and can track their order status from the dashboard.

## **1.6. Mock Evaluations**

### **Storyboard 01: Secure Access Workflow**

Secure Access aims to provide an intuitive, efficient, and secure login experience. The mock evaluation focuses on minimizing errors, providing clear feedback, and offering accessible recovery options (Ye *et al.*, 2020). The interface should use familiar design patterns, and the goal is to achieve a login success rate of over 95% for returning users.

### **Storyboard 02: Visualization Workflow**

The usability goal is to create an intuitive and engaging visualization experience for purchasing decisions ('Index Terms-User Interface Study, User Experience Theory, Design Process, Tools for creating user interfaces, and other essentials', no date). The mock evaluation will evaluate catalog navigation, 3D controls' responsiveness, and contextual visualization options' clarity, with a goal of 90% user completion within 2 minutes.

### **Storyboard 03: Customization Workflow**

The Customization Workflow enables users to customize furniture items by selecting a piece, modifying attributes like color, material, or dimensions, and saving or adding the customized item to the cart, providing real-time previews and summary of selections.

### **Storyboard 04: Order Placement Workflow**

The final storyboard outlines the checkout process, illustrating the user reviewing their cart, entering shipping details, and selecting a payment method. A progress bar tracks progress, and a confirmation message and estimated delivery time are displayed upon successful payment, promoting error prevention, user satisfaction, and efficient task completion.

## **1.7. User Feedback**

A user feedback data collection technique involved structured questions and storyboards to understand user behavior and preferences on an online furniture e-commerce platform, resulting in 5 responses, exceeding the expected 2.

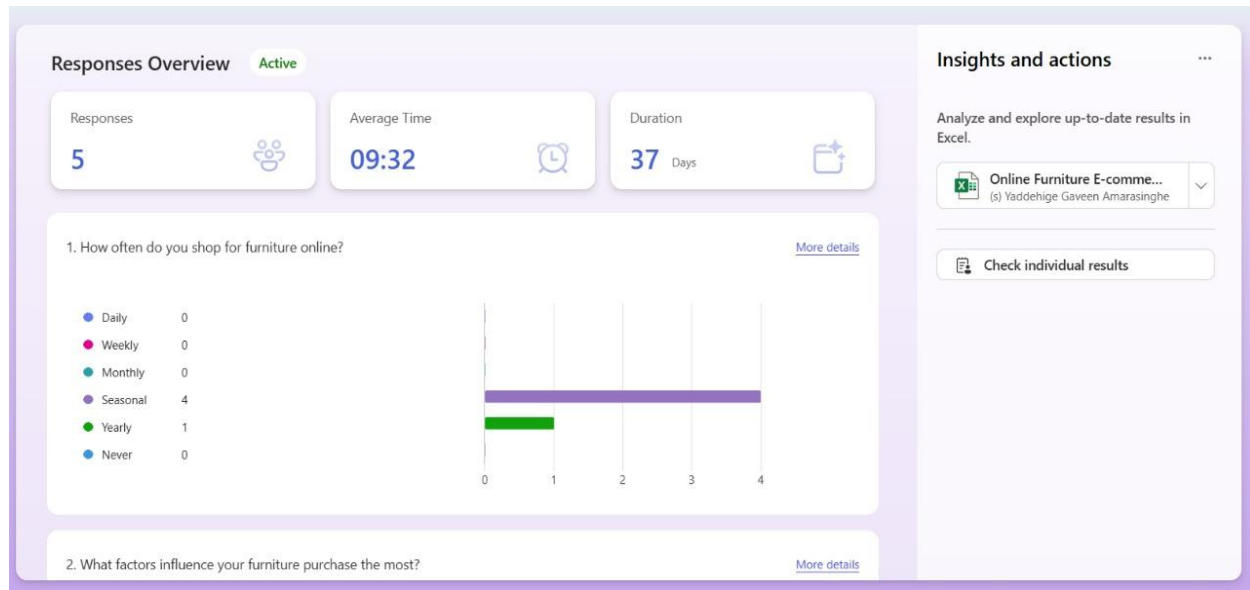


Figure 14. Response Overview.

The majority of users shop online seasonally for furniture, with bedroom and living room furnishings being the most popular. High-quality photos, detailed product descriptions, and easy navigation are valued in online furniture stores. Four participants found the virtual room planner/3D preview tool useful, indicating a growing interest in visualizing furniture before purchasing.

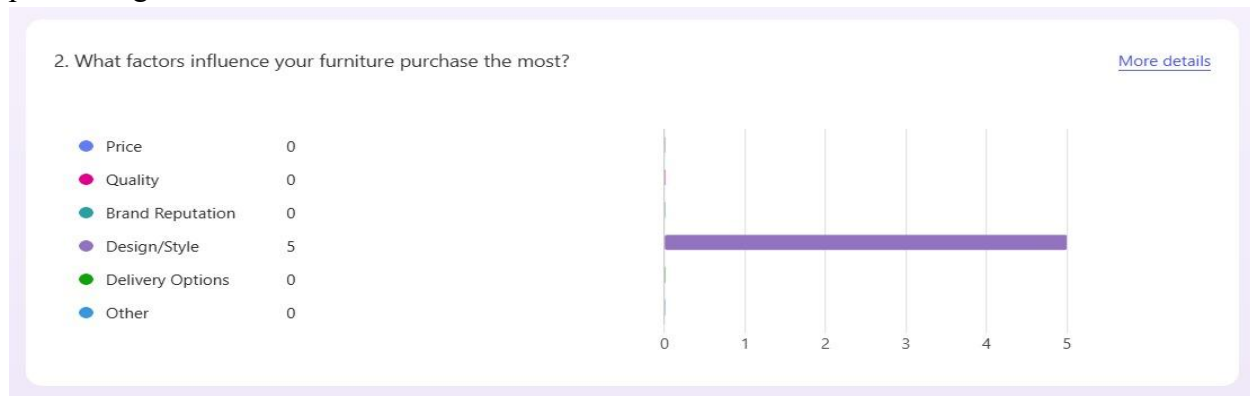


Figure 15. Response Overview

The majority of respondents worry about product quality, shipping delays, return policy challenges, and hidden costs when purchasing online furniture. However, four respondents

would recommend a user-friendly platform for its utility, efficiency, and accessibility.

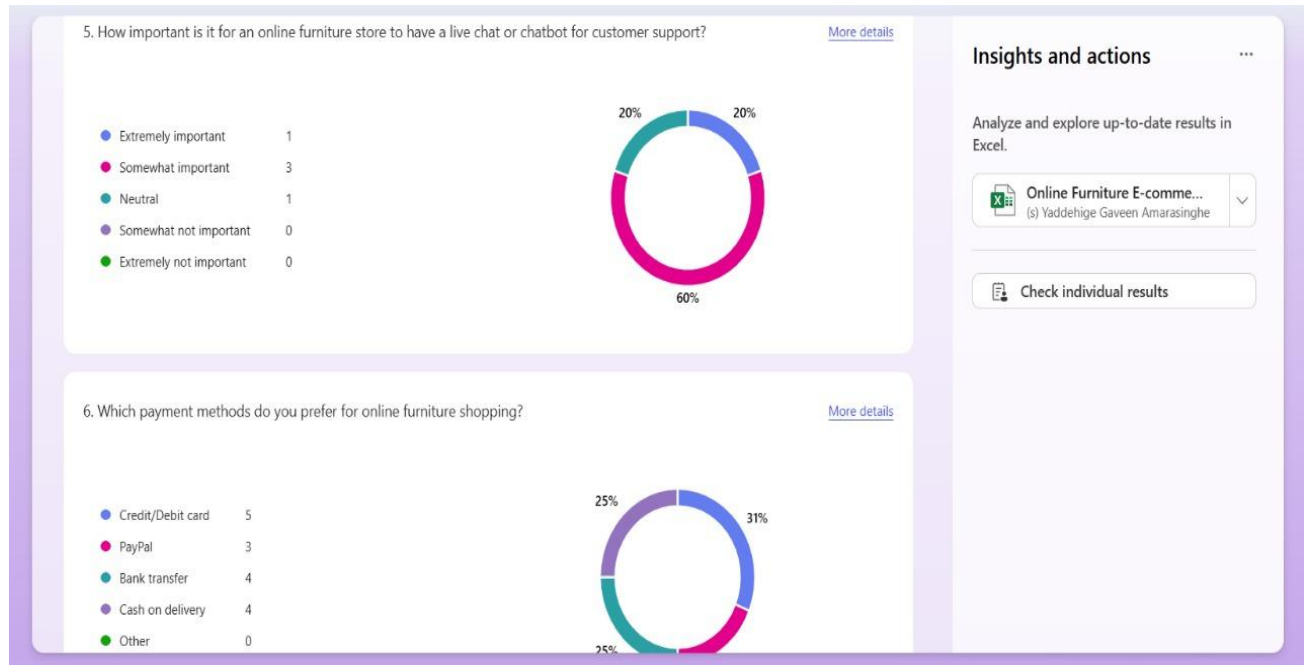


Figure 16. Survey screenshot question 5 -6.

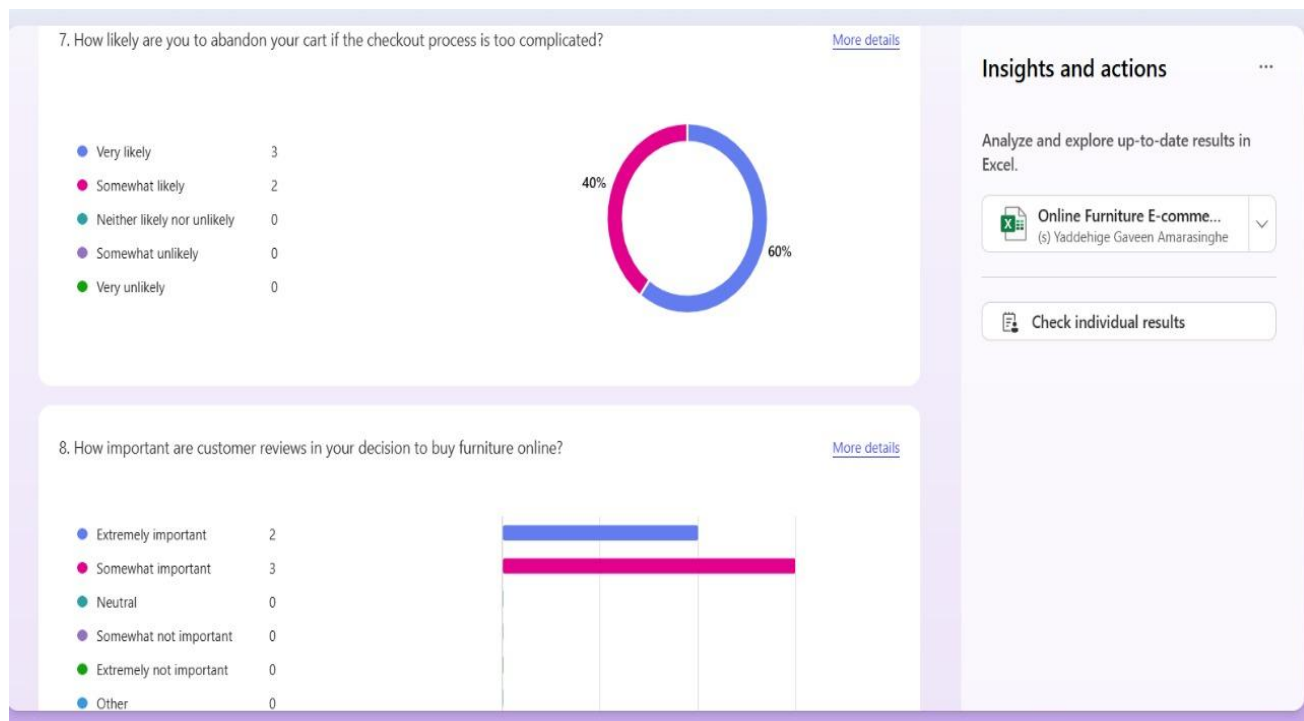


Figure 17. Survey screenshot question 7-8.

In addition to the survey, two or more users were presented with storyboards depicting the e-commerce system's user interface and flow. Users enjoyed the straightforward layout, favored

minimal yet useful design components, and stressed the necessity of intuitive navigation and fast loading times. These comments will help refine the UI/UX design and prioritize features in future development rounds.

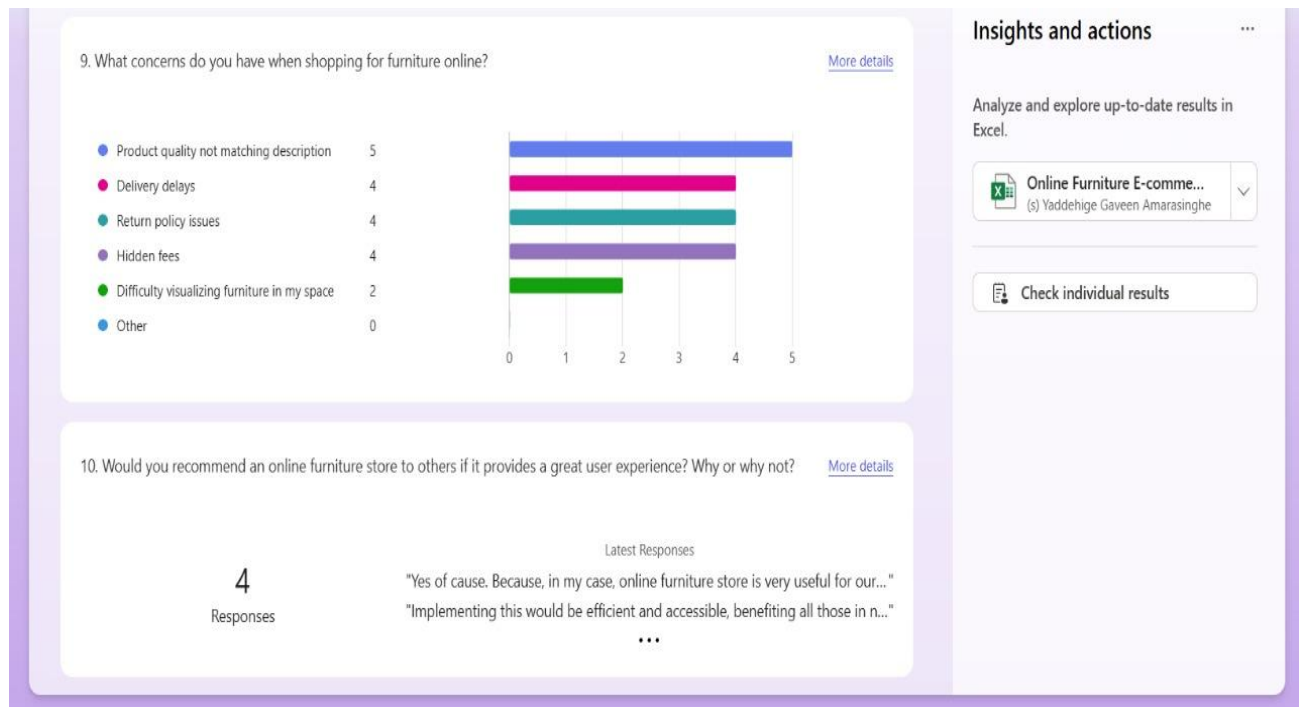


Figure 18. Survey screenshot question 9 - 10.

Survey available at - <https://forms.office.com/e/mmA3yfnYpV>

[Survey Screenshots](#) are included in the appendix.

## 1.8. Feedback and Updates

The furniture showroom desktop application, designed in IntelliJ IDEA using Java Swing and JavaFX, prioritizes user input for usability, responsiveness, and happiness. It uses real-time visual feedback and structured feedback tools for post-interaction insights, enabling consumers and engineers to enhance systems.

### Login and Sign-Up System Feedback

The login system (Login.java) uses a label component (lblFeedback) to provide users with context-sensitive feedback on login attempts, input validation, and authentication status. The system uses real-time visual signals, changing the label color red for incorrect credentials and green for successful login confirmations.

```

User.class  User.java 1  SignIn.java 1 X
src > FurniturePackage > SignIn.java > {} FurniturePackage
14 public class SignIn extends Application {
15     @Override
16     public void start(Stage primaryStage) {
17         // Main container with modern styling
18         BorderPane mainContainer = new BorderPane();
19
20         // Left side with brand image/logo
21         VBox leftPanel = new VBox(20);
22         leftPanel.setPrefWidth(500);
23         leftPanel.setStyle("-fx-background-color: #2c3e50;");
24         leftPanel.setAlignment(Pos.CENTER);
25
26         // Brand logo or image could go here
27         Label brandName = new Label("Furniture Hub");
28         brandName.getStyleClass().add("brand-label");
29
30         Text tagline = new Text("Design your perfect space");
31         tagline.getStyleClass().add("tagline");
32
33         leftPanel.getChildren().addAll(brandName, tagline);
34
35         // Right side with sign up form
36         VBox rightPanel = new VBox(25);
37         rightPanel.setPadding(new Insets(50));
38         rightPanel.setAlignment(Pos.CENTER);
39         rightPanel.setPrefWidth(500);
40         rightPanel.setStyle("-fx-background-color: white;");
41
42         Label lblTitle = new Label("Create Account");
43         lblTitle.getStyleClass().add("form-title");
44
45         Label lblSubtitle = new Label("Sign up to get started");
46         lblSubtitle.getStyleClass().add("form-subtitle");
47
48         // Username field with icon

```

Figure 19. Login page code

The SignIn.java sign-up system uses a feedback mechanism to notify users about registration success, form input validation, email format accuracy, and existing usernames or email addresses, improving user experience by eliminating confusion and allowing quick error correction.

```

14 public class login extends Application {
15     public void start(Stage primaryStage) {
16         BorderPane mainContainer = new BorderPane();
17
18         // Left side with brand image/logo
19         VBox leftPanel = new VBox(20);
20         leftPanel.setPrefWidth(500);
21         leftPanel.setStyle("-fx-background-color: #2c3e50;");
22         leftPanel.setAlignment(Pos.CENTER);
23
24         // Brand logo or image could go here
25         Label brandName = new Label("Furniture Hub");
26         brandName.getStyleClass().add("brand-label");
27
28         Text tagline = new Text("Design your perfect space");
29         tagline.getStyleClass().add("tagline");
30
31         leftPanel.getChildren().addAll(brandName, tagline);
32
33         // Right side with login form
34         VBox rightPanel = new VBox(25);
35         rightPanel.setPadding(new Insets(50));
36         rightPanel.setAlignment(Pos.CENTER);
37         rightPanel.setPrefWidth(500);
38         rightPanel.setStyle("-fx-background-color: white;");
39
40         Label lblTitle = new Label("Welcome Back");
41         lblTitle.getStyleClass().add("form-title");
42
43         Label lblSubtitle = new Label("Login to your account");
44         lblSubtitle.getStyleClass().add("form-subtitle");
45
46         // Username field with icon
47         HBox usernameBox = new HBox(10);
48         usernameBox.setAlignment(Pos.CENTER_LEFT);
49         TextField txtInput = new TextField();
50         txtInput.setPromptText("Username");
51         txtInput.getStyleClass().add("modern-field");
52         usernameBox.getChildren().add(txtInput);
53
54         // Password field with icon
55         HBox passwordBox = new HBox(10);
56         passwordBox.setAlignment(Pos.CENTER_LEFT);
57         PasswordField txtpwd = new PasswordField();
58         txtpwd.setPromptText("Password");
59         txtpwd.getStyleClass().add("modern-field");
60         passwordBox.getChildren().add(txtpwd);
61
62     }
63 }

```

Figure 20. Signup page code.

## In-App Feedback Collection and User Insight Gathering

Beyond form-level feedback, the program uses a variety of data collection approaches to get user feedback on their overall experience (Lee *et al.*, 2020). A unique in-app feedback form, created with Java Swing and JavaFX components, allows users to leave comments, score their experience, and report problems right from the application interface. Text fields, buttons, and dialog boxes (JDialog, JOptionPane, or Alert) are used to make the feedback process easier and more accessible.

### **Behavioral Analytics and External Feedback Channels**

The study uses implicit feedback to understand user behavior, recording product views, navigation patterns, and feature usage using event listeners. Pop-up dialogs and structured surveys are used to capture fast insights and collect both qualitative and quantitative data at key interaction points.

### **Bug Reporting and External Integration**

The bug report tool allows users to report issues and upload screenshots. When internet connectivity is available, external tools like Google Forms are incorporated using JavaFX WebView or external web browsers, enabling ongoing improvement and user-centric design.

## **2. Methods and Technology**

### **2.1. Platform**

The furniture design application was developed as a Java-based desktop application using the Java Swing GUI toolkit, in accordance with the coursework requirements. The application is intended for use by in-store furniture designers to help customers visualize room layouts and furniture combinations.

- I. Operating System Targeted: Windows 11
- II. Application Type: Standalone Desktop Application
- III. Programming Language: Java
- IV. UI Toolkit: Java Swing
- V. IDE Used: NetBeans
- VI. Version Control: Git (GitHub repository linked in the report)

### **2.2. Architecture**

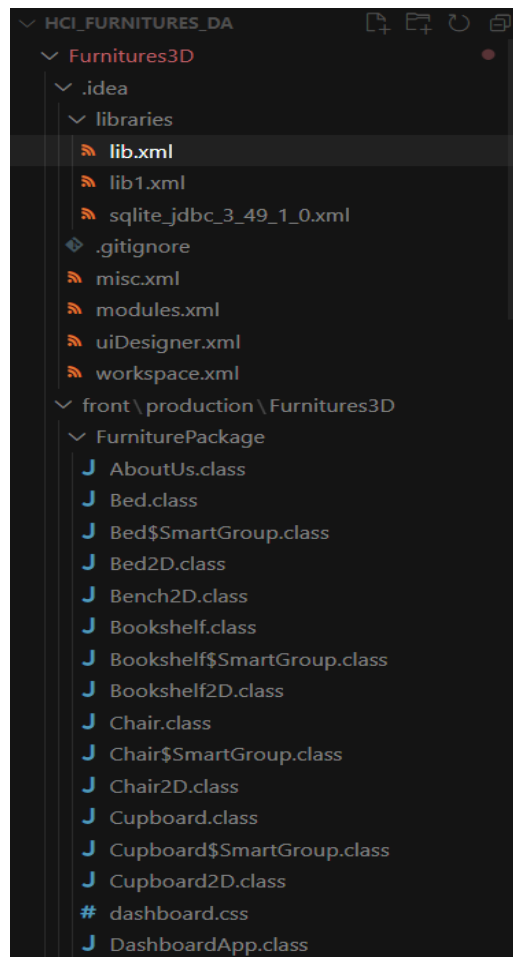
The furniture design application was designed using the Model-View-Controller (MVC) pattern, dividing its logic into three distinct components. The Model layer manages business logic and data structures, while the View layer includes user interface components (Suselo *et al.*, 2022). The Controller handles user inputs and updates. This approach ensures high modularity, improved code maintainability, and clear separation of concerns.

## 2.3. Technologies and Libraries Used

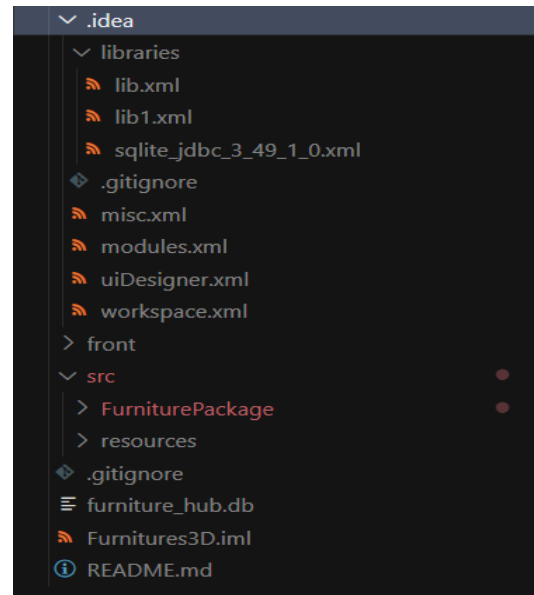
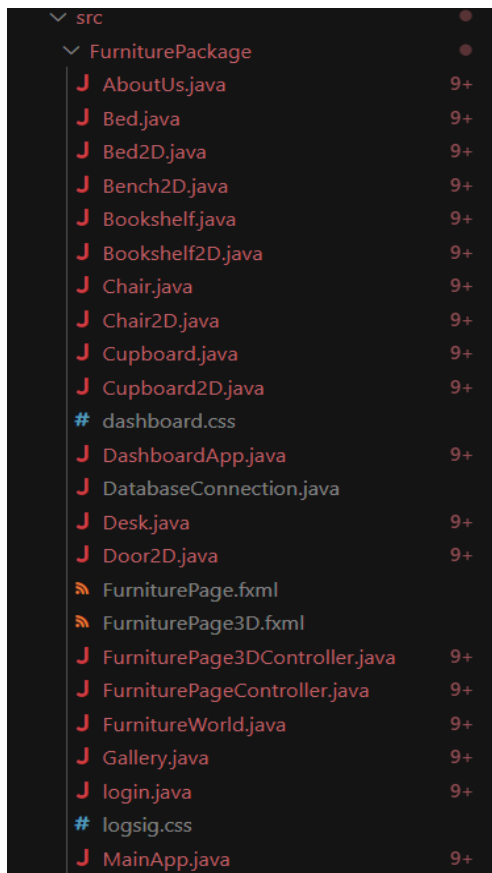
Table 3. Used technologies

Component	Technology / Library	Purpose
GUI	Java Swing	User interface creation
Drawing/Canvas	Java2D Graphics API	2D design layout and furniture placement
3D Rendering	Lightweight Java Game Library (LWJGL) or JOGL	Simple 3D rendering of layouts
JSON Parsing	Jackson / Gson	Saving and loading design data
Database	MySQL	Saving user accounts and design sessions
Version Control	Git + GitHub	Code management and collaboration

## 2.4. Coding Details







## Implementation and Testing

### Automated Testing

The Furniture Store application, developed using Java Swing, underwent automated testing using the JUnit framework and AssertJ-Swing, a Java GUI testing library. Key features tested included adding items to the cart and input validation for empty fields. GUI components were named programmatically for accurate identification(‘Fundamentals of Computer Graphics, Fourth Edition ( PDFDrive )’, no date).


## Testing.java

```

1  import javax.swing.*;
2  import java.awt.*;
3
4  public class Testing {
5      public static void main(String[] args) {
6          JFrame frame = new JFrame("Feedback");
7          frame.setSize(400, 300);
8          frame.setLayout(new BorderLayout());
9
10         JTextArea feedbackArea = new JTextArea("Enter your feedback here...");
11         JButton submitButton = new JButton("Submit");
12
13         submitButton.addActionListener(e -> {
14             String feedback = feedbackArea.getText();
15             // Store in DB or send to server
16             JOptionPane.showMessageDialog(frame, "Thank you for your feedback!");
17         });
18
19         frame.add(feedbackArea, BorderLayout.CENTER);
20         frame.add(submitButton, BorderLayout.SOUTH);
21         frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
22         frame.setVisible(true);
23     }
24 }
25

```

The test process was conducted in a controlled environment to verify expected behavior under various user inputs, identifying functional issues early, improving the user interface quality, and ensuring system usability and interaction standards. This method effectively validated business logic and user interface, using IDEs like IntelliJ IDEA or Apache Maven.

 pom.xml U pom.xml

```

1  <dependency>
2      <groupId>org.assertj</groupId>
3      <artifactId>assertj-swing-junit</artifactId>
4      <version>3.17.1</version>
5      <scope>test</scope>
6  </dependency>

```

## Implementation Overview

Development followed an Agile (Scrum) methodology with iterative sprints. Features were developed in the following order:

- I. Login and authentication
- II. Room setup screen
- III. Basic 2D canvas interaction
- IV. Furniture object library and drag-and-drop
- V. Save/load functionality
- VI. Color and shading tools
- VII. 3D conversion and visualization
- VIII. Final polish and user testing

Each sprint included design, implementation, and review tasks.

## Testing Strategy

The testing framework used was JUnit, which allowed structured programmatic testing. To enhance GUI testing, AssertJ-Swing, a Java library, was used to simulate user behavior. Swing components, like text fields and buttons, were named for reliable access.

## Final Outcome

The final implementation of a project successfully met all functional requirements, including a secure login system, 2D drag-and-drop interface, 3D viewing mode, interactive features like scaling, shading, and color customization, and the ability to save, load, edit, and delete design sessions. However, improvements like an undo/redo mechanism and support for texture mapping were identified for future development phases. The system was designed for real-world retail use and is suitable for repeated use.

### 3. Limitations

Objective	% completion	Comments
Customer can provide the size, shape and colour scheme for the room.	40%	Only colour customization is supported.
Customer can create a new design based on the room size, shape and colour scheme.	30%	Users can upload room images.
Customer can visualise the design in 2D.	100%	Present, fully functional.
Customer can visualise the design in 3D.	100%	360 ° viewing of 3D model is available.
Customer can scale the design to best fit the room.	100%	Users can scale the design.
Customer can add shade to the design as a whole or selected parts.	100%	Can add the shade to the whole.
Customer can change the colour of the design as a whole or selected parts.	100%	Can change the colour as a whole.
Customer can edit/ delete the design.	0%	Not designed.
Customer can save the design.	0%	Not implemented.

*Table 4.Limitations.*

## References

Batch, A. *et al.* (2024) 'uxSense: Supporting User Experience Analysis with Visualization and Computer Vision', *IEEE Transactions on Visualization and Computer Graphics*, 30(7), pp. 3841–3856. Available at: <https://doi.org/10.1109/TVCG.2023.3241581>.

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Lee, B. *et al.* (2020) 'Reaching Broader Audiences with Data Visualization', *IEEE Computer Graphics and Applications*, 40(2), pp. 82–90. Available at: <https://doi.org/10.1109/MCG.2020.2968244>.

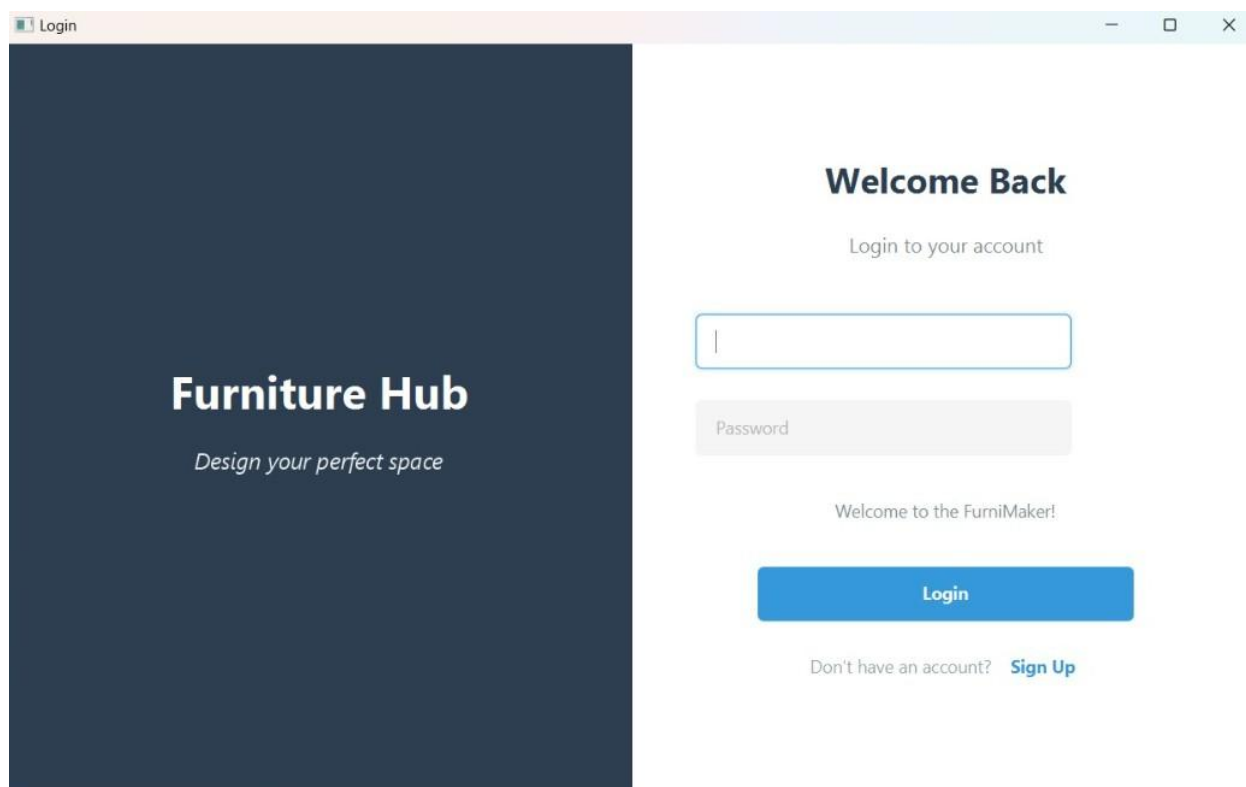
Suselo, T. *et al.* (2022) *Mobile Augmented Reality for Learning 3D Transformations in Computer Graphics*.

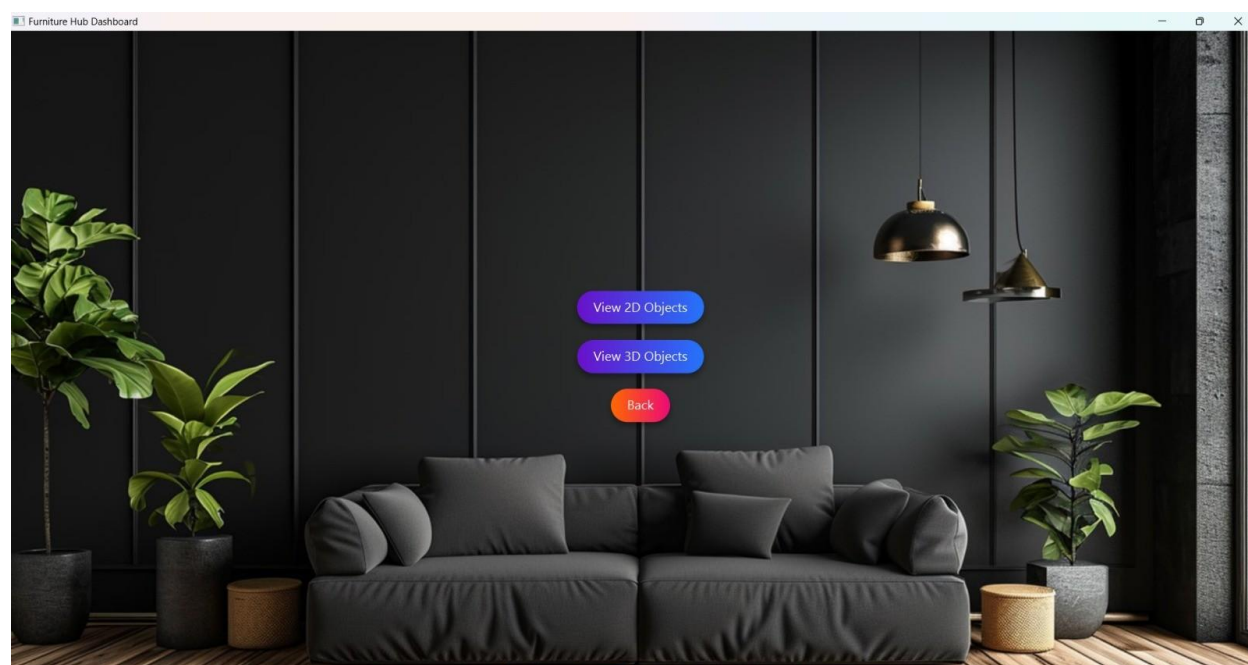
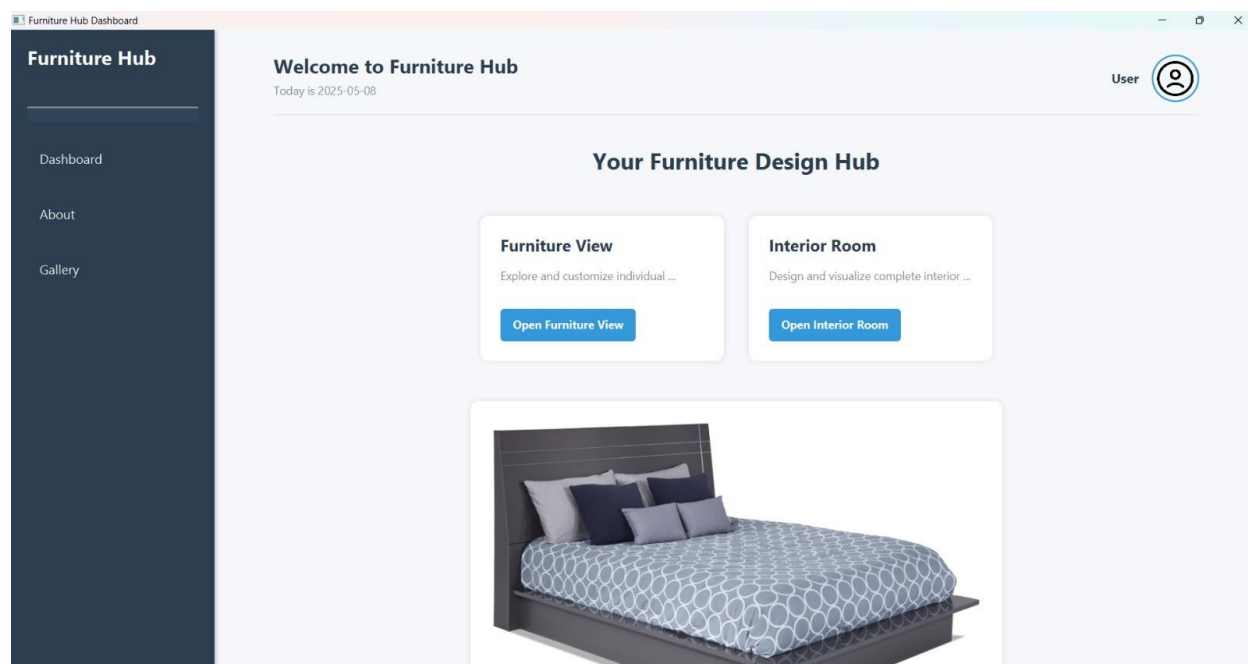
Ye, Y.C. *et al.* (2020) 'A User-Centered Design Study in Scientific Visualization Targeting Domain Experts', *IEEE Transactions on Visualization and Computer Graphics*, 26(6), pp. 2192–2203. Available at: <https://doi.org/10.1109/TVCG.2020.2970525>.

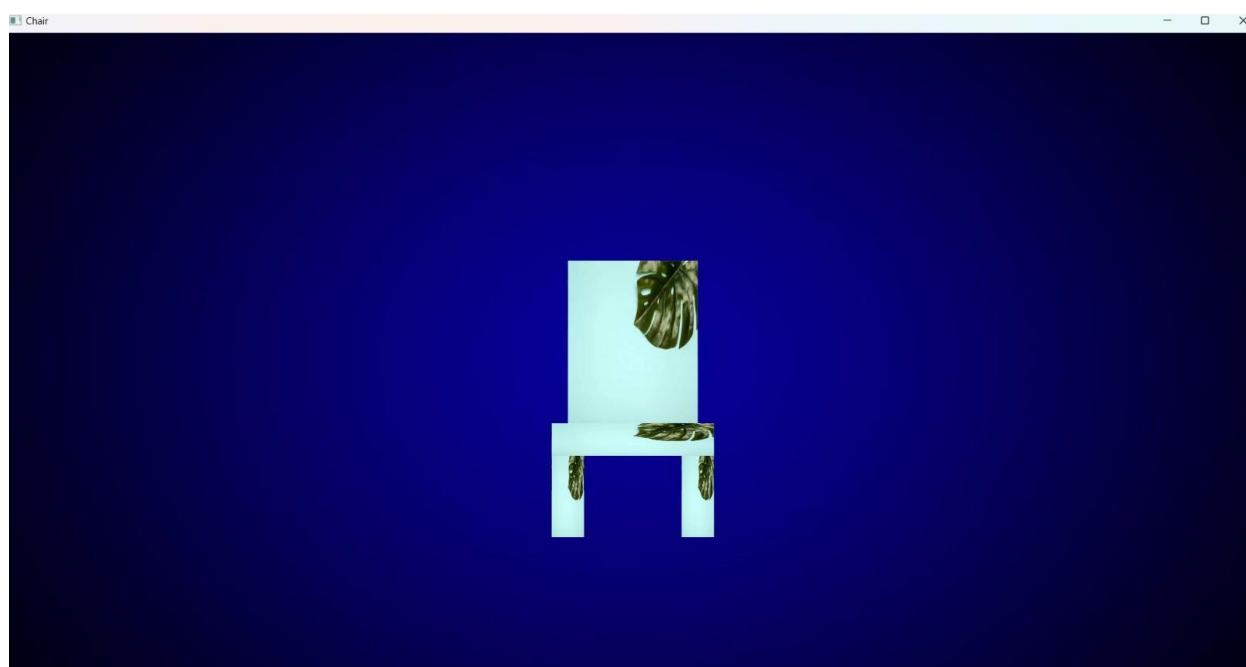
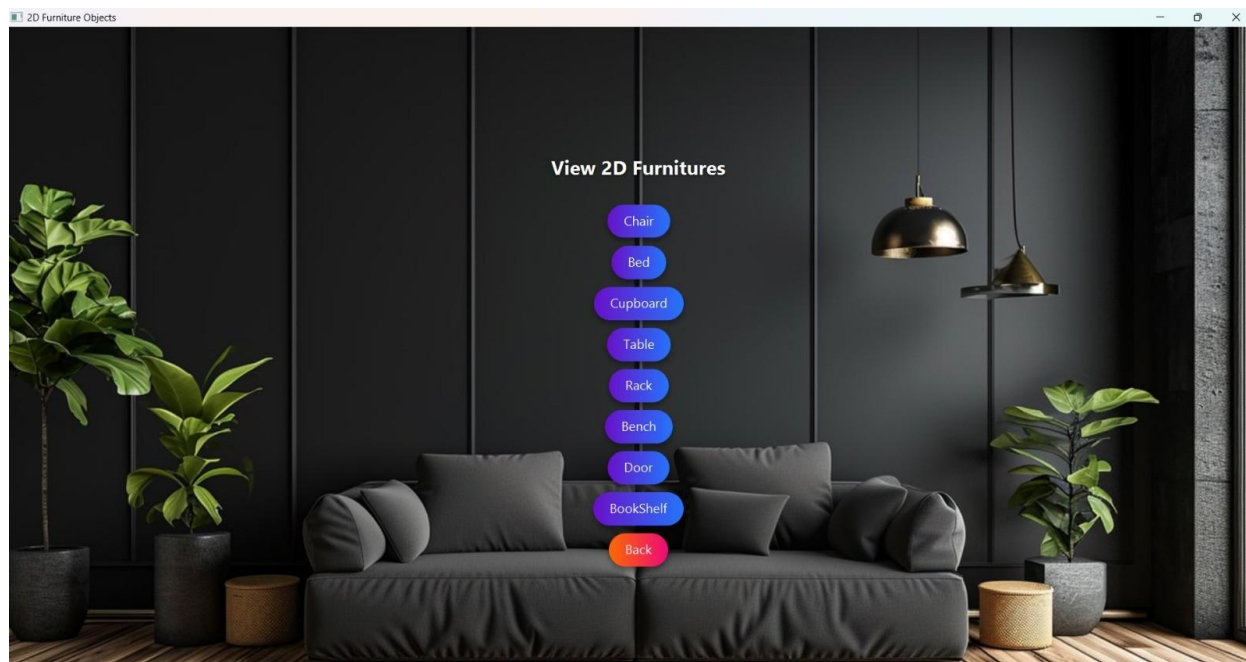
# Appendix

Any other information you want to include in the report.

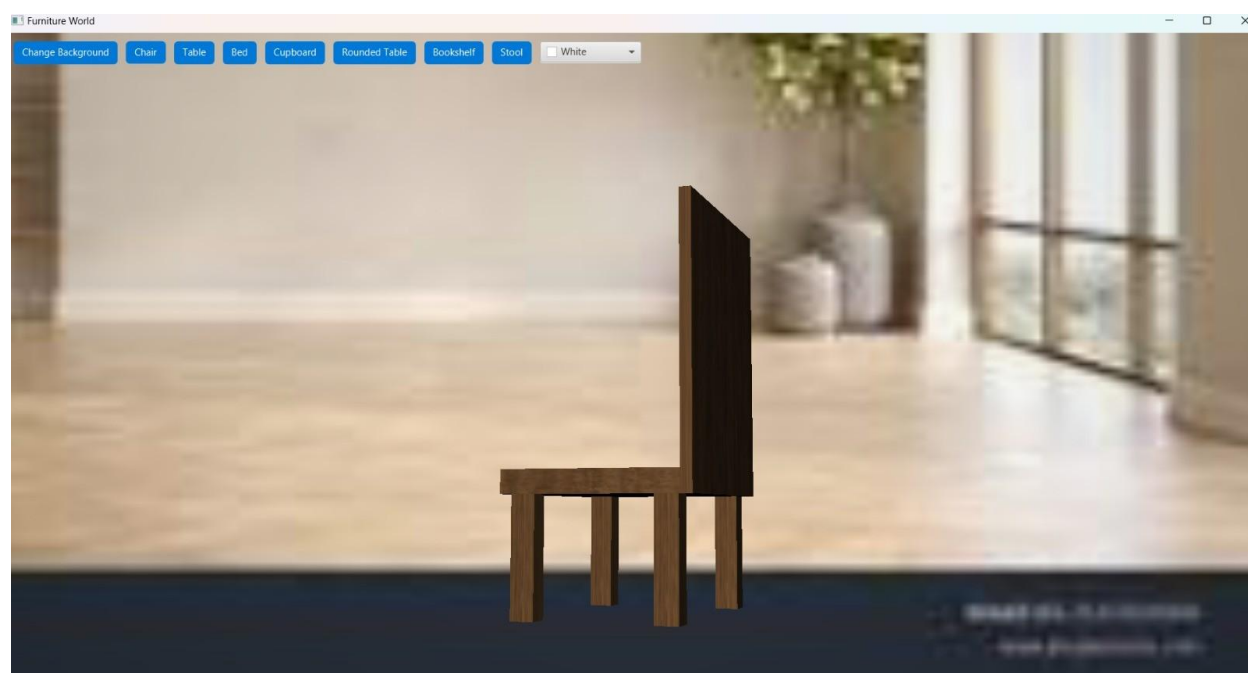
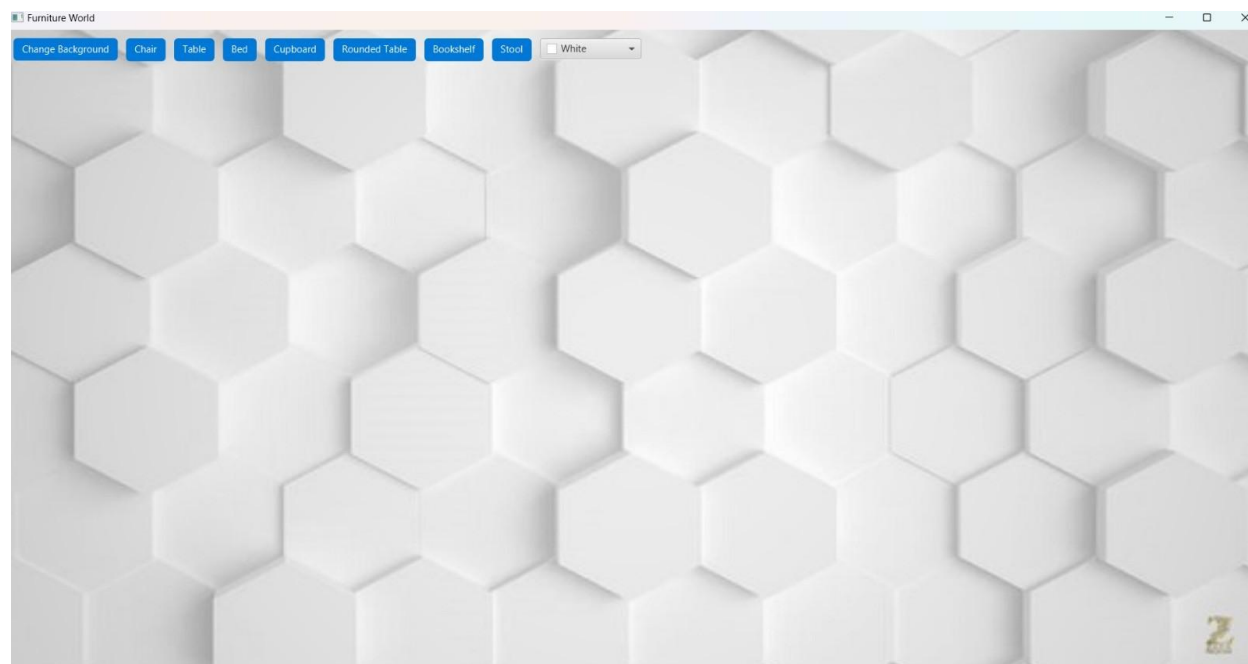
## Screenshots of UIs

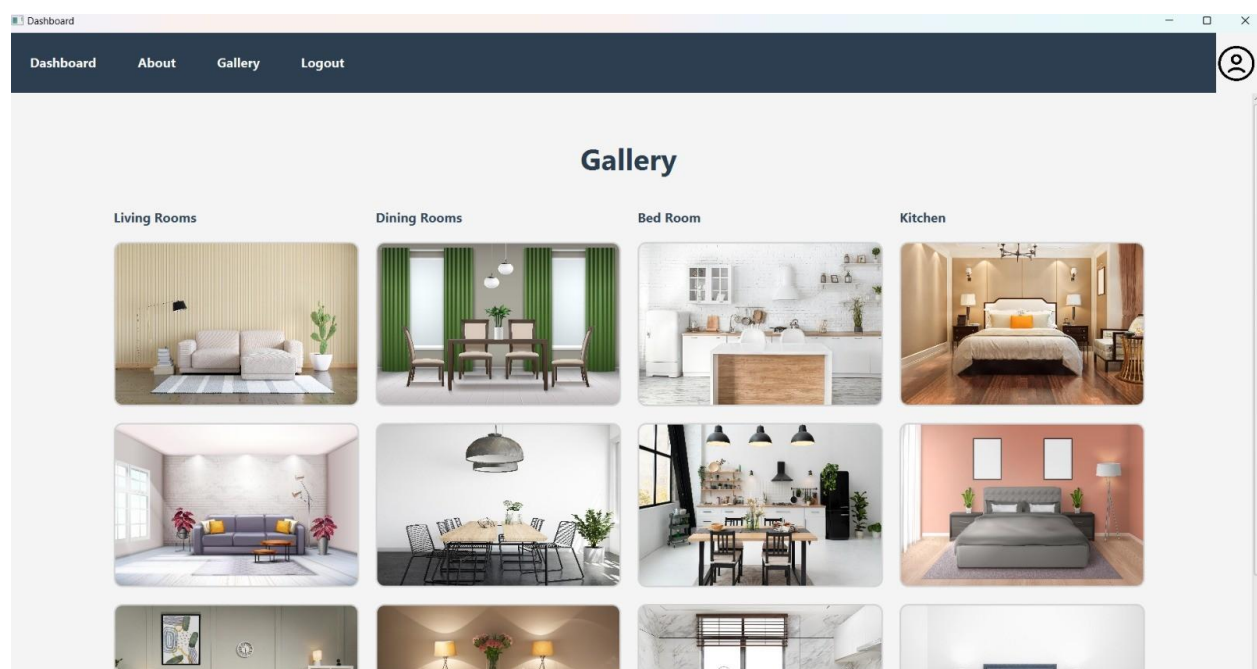
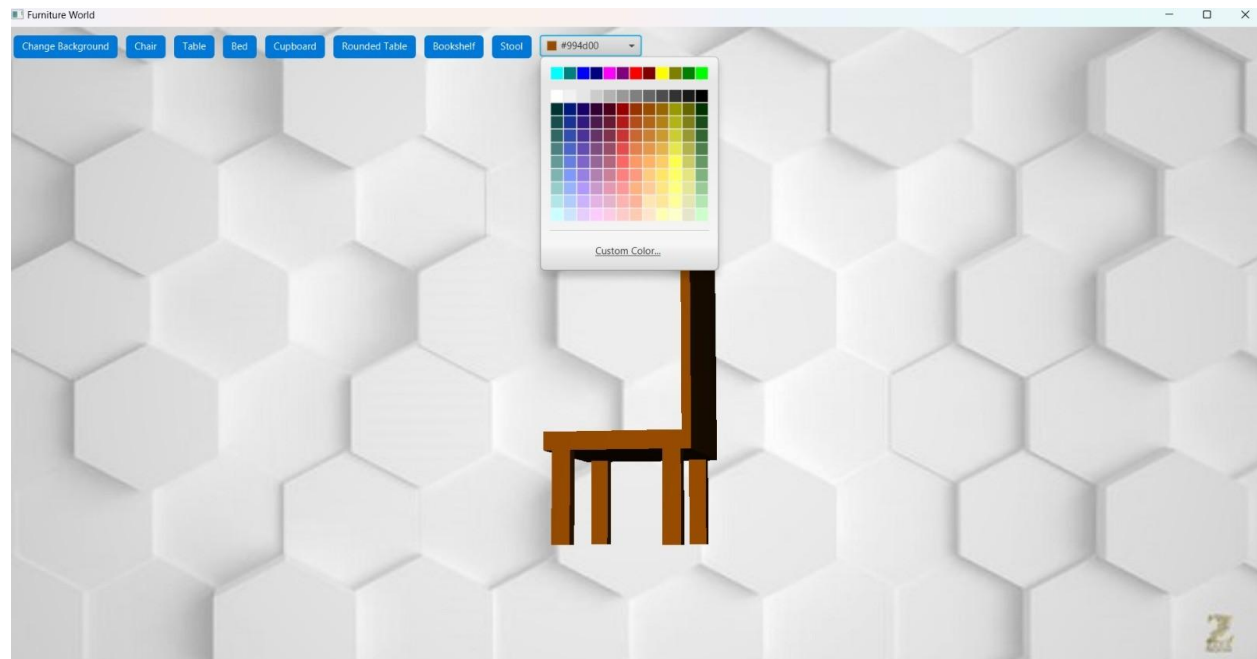




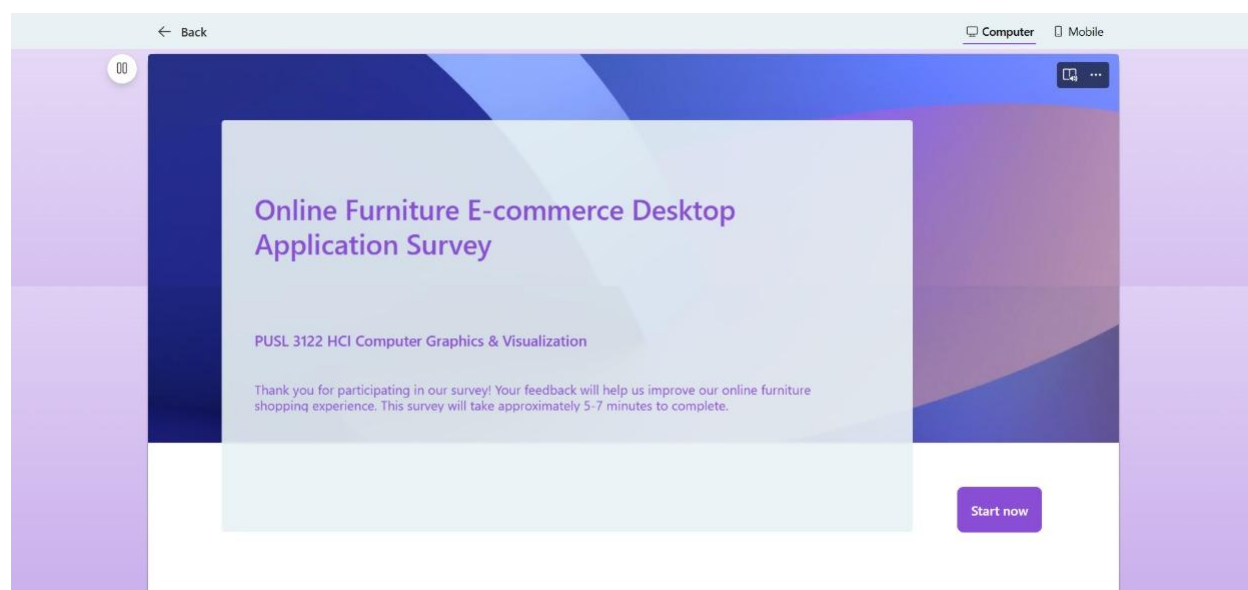








## Screenshots of the Survey



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## Online Furniture E-commerce Desktop Application Survey

### Online Store Features

This section focuses on the features you value in an online furniture shopping experience

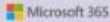
4. What features do you consider essential in an online furniture store? [🔍](#)

- ☐ High-quality images
- ☐ Detailed product descriptions
- ☐ Virtual room planner/3D preview
- ☐ Easy navigation
- ☐ Fast loading times
- ☐ Other

5. How important is it for an online furniture store to have a live chat or chatbot for customer support? [🔍](#)

- ☐ Extremely important
- ☐ Somewhat important
- ☐ Neutral
- ☐ Somewhat not important
- ☐ Extremely not important

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
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## Online Furniture E-commerce Desktop Application Survey

### Payment and Checkout Experience

This section explores your preferences for payments and the checkout process.

6. Which payment methods do you prefer for online furniture shopping? 


☐ Credit/Debit card

☐ PayPal

☐ Bank transfer

☐ Cash on delivery

☐ Other

7. How likely are you to abandon your cart if the checkout process is too complicated? 

☐ Very likely


☐ Somewhat likely

☐ Neither likely nor unlikely

☐ Somewhat unlikely

☐ Very unlikely

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Computer Mobile

## Online Furniture E-commerce Desktop Application Survey

### Trust and Decision-Making

This section examines how trust and reviews affect your purchasing decisions.

8. How important are customer reviews in your decision to buy furniture online?

☐ Extremely important

☐ Somewhat important

☐ Neutral

☐ Somewhat not important

☐ Extremely not important

☐ Other

9. What concerns do you have when shopping for furniture online?

☐ Product quality not matching description

☐ Delivery delays

☐ Return policy issues

☐ Hidden fees

☐ Difficulty visualizing furniture in my space

☐ Other

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Computer Mobile

## Online Furniture E-commerce Desktop Application Survey

### Overall Experience and Recommendations

This section gathers your thoughts on recommending the store based on user experience.

10. Would you recommend an online furniture store to others if it provides a great user experience? Why or why not?

Enter your answer

Back

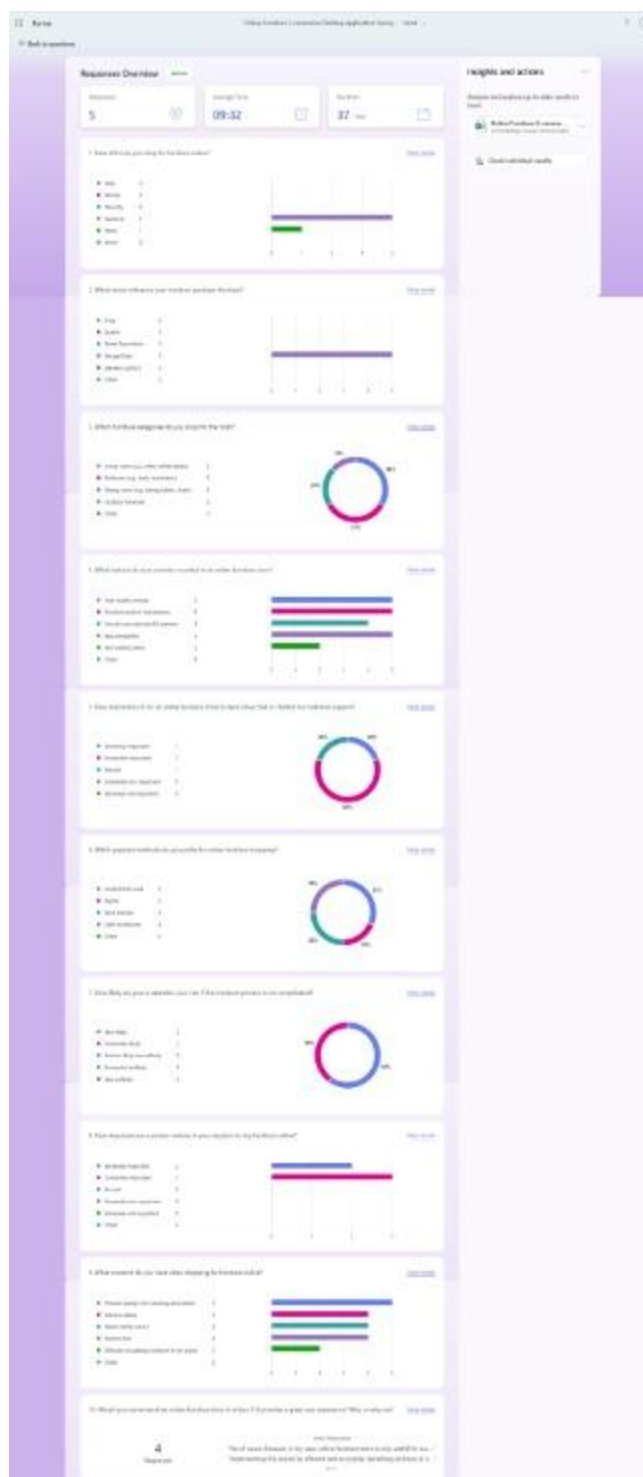
Submit

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ComputerMobile

## Online Furniture E-commerce Desktop Application Survey

Hi, Yashdeep! When you submit this form, the owner will see your name and email address.

### Shopping Habits

*This section helps us understand how often you shop for furniture online and your general preferences.*

1. How often do you shop for furniture online? [?](#)

☐ Daily

☐ Weekly

☐ Monthly

☐ Seasonal

☐ Yearly

☐ Never

2. What factors influence your furniture purchase the most? [?](#)

☐ Price

☐ Quality

☐ Brand Reputation

☐ Design/Style

☐ Delivery Options

☐ Other

3. Which furniture categories do you shop for the most? [?](#)

☐ Living room (e.g., sofas, coffee tables)

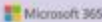
☐ Bedroom (e.g., beds, wardrobes)

☐ Dining room (e.g., dining tables, chairs)

☐ Outdoor furniture

☐ Other

[Next](#)



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## Responses Overview

Active

Responses

5



Average Time

09:32



Duration

37 Days



## Insights and actions

...

Analyze and explore up-to-date results in Excel.

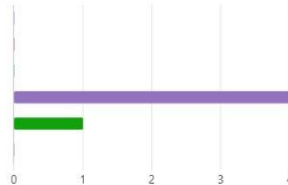
Online Furniture E-comm...  
(s) Yaddheghe Gaveen Amarasinghe

Check individual results

1. How often do you shop for furniture online?

[More details](#)

- Daily 0
- Weekly 0
- Monthly 0
- Seasonal 4
- Yearly 1
- Never 0



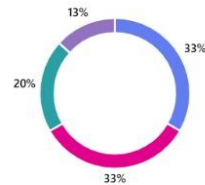
2. What factors influence your furniture purchase the most?

[More details](#)

3. Which furniture categories do you shop for the most?

[More details](#)

- Living room (e.g., sofas, coffee tables) 5
- Bedroom (e.g., beds, wardrobes) 5
- Dining room (e.g., dining tables, chairs) 3
- Outdoor furniture 2
- Other 0



4. What features do you consider essential in an online furniture store?

[More details](#)

- High-quality images 5
- Detailed product descriptions 5
- Virtual room planner/3D preview 4
- Easy navigation 5
- Fast loading times 2



## Insights and actions

...

Analyze and explore up-to-date results in Excel.

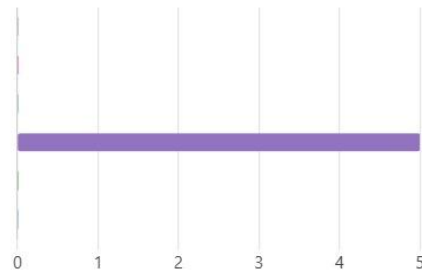
Online Furniture E-comm...  
(s) Yaddheghe Gaveen Amarasinghe

Check individual results

2. What factors influence your furniture purchase the most?

[More details](#)

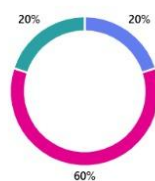
- Price 0
- Quality 0
- Brand Reputation 0
- Design/Style 5
- Delivery Options 0
- Other 0



5. How important is it for an online furniture store to have a live chat or chatbot for customer support?

[More details](#)

Extremely important	1
Somewhat important	3
Neutral	1
Somewhat not important	0
Extremely not important	0



### Insights and actions

...

Analyze and explore up-to-date results in Excel.

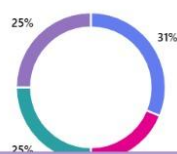
Online Furniture E-comm...  
(s) Yaddhegige Gaveen Amarasinghe

Check individual results

6. Which payment methods do you prefer for online furniture shopping?

[More details](#)

Credit/Debit card	5
PayPal	3
Bank transfer	4
Cash on delivery	4
Other	0



### Insights and actions

...

Analyze and explore up-to-date results in Excel.

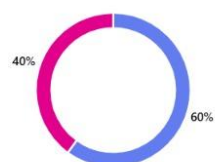
Online Furniture E-comm...  
(s) Yaddhegige Gaveen Amarasinghe

Check individual results

7. How likely are you to abandon your cart if the checkout process is too complicated?

[More details](#)

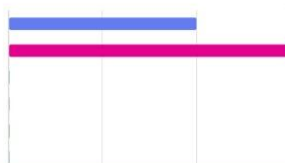
Very likely	3
Somewhat likely	2
Neither likely nor unlikely	0
Somewhat unlikely	0
Very unlikely	0

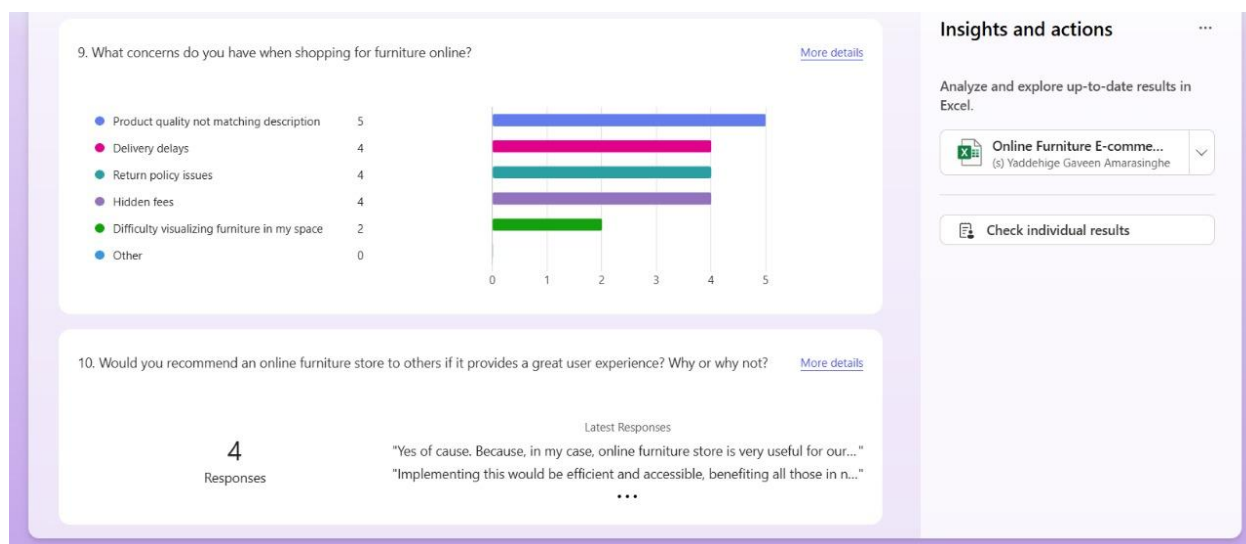


8. How important are customer reviews in your decision to buy furniture online?

[More details](#)

Extremely important	2
Somewhat important	3
Neutral	0
Somewhat not important	0
Extremely not important	0
Other	0





\*\*\*\*\*