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UNIVERSITI TEKNOLOGI MALAYSIA  
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**UNIVERSITI TEKNOLOGI  
MALAYSIA**

**HUMAN COMPUTER  
INTERACTION  
(SECV2113)**

**PROJECT PART 3**

**Conceptual & Physical Design**

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## 1.0 Storyboard

### Goal 1: Order Food

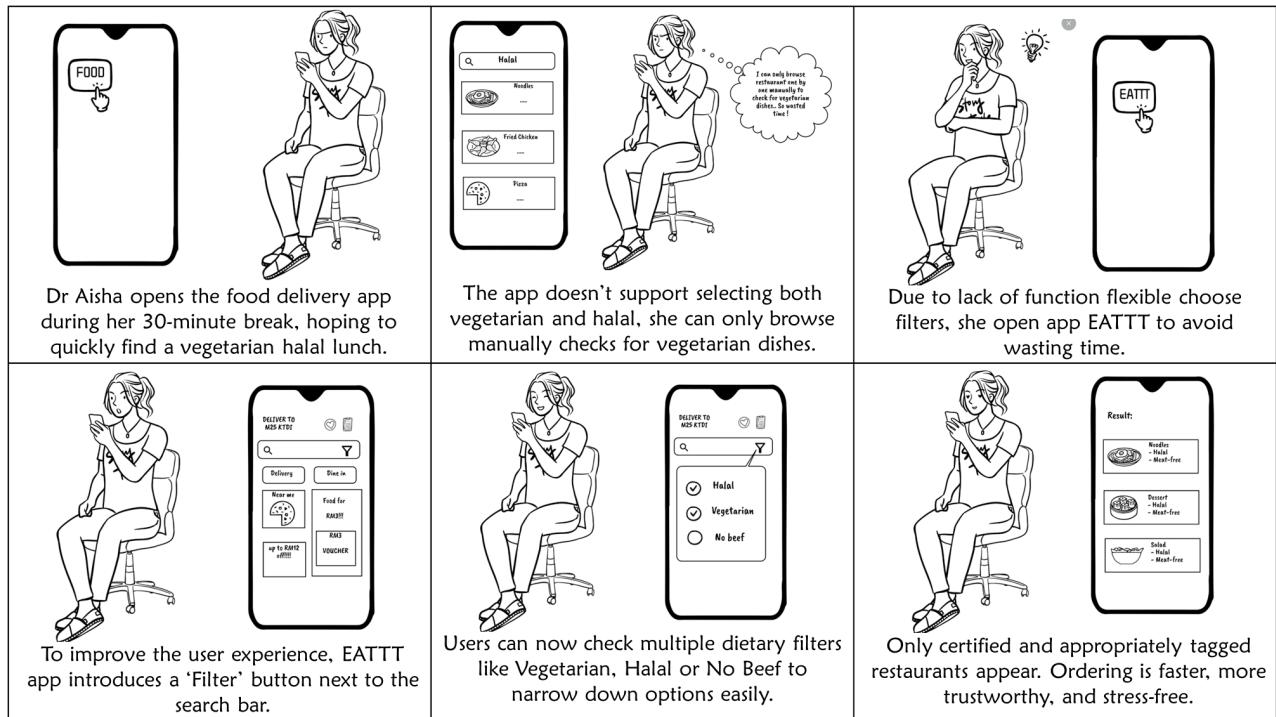


Figure 1: Storyboard of Task 1 (Order Food)

### Goal 2 - Monitor and Manage Order Status

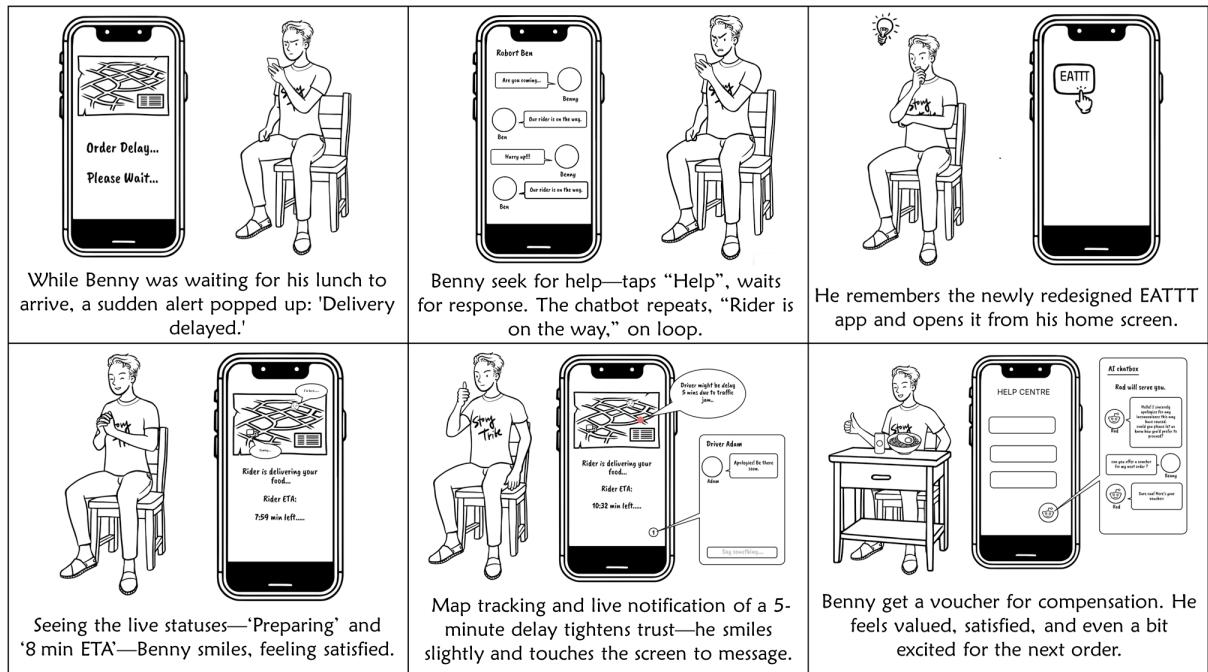


Figure 2: Storyboard of Task 2 (Monitor and Manage Order Status)

### Goal 3 -Upload menu

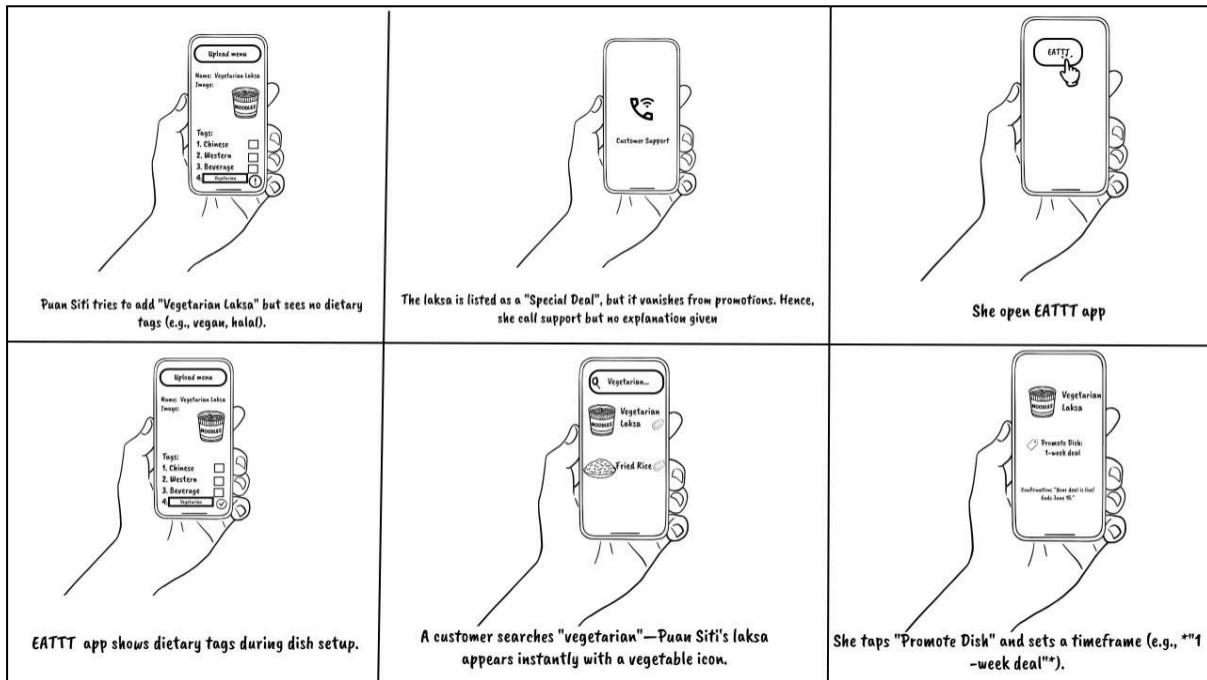


Figure 3: Storyboard of Task 3 (Upload Menu)

## 2.0 Alternative Design

### 2.1 Alternative Design 1 –Angela Ngu Xin Yi

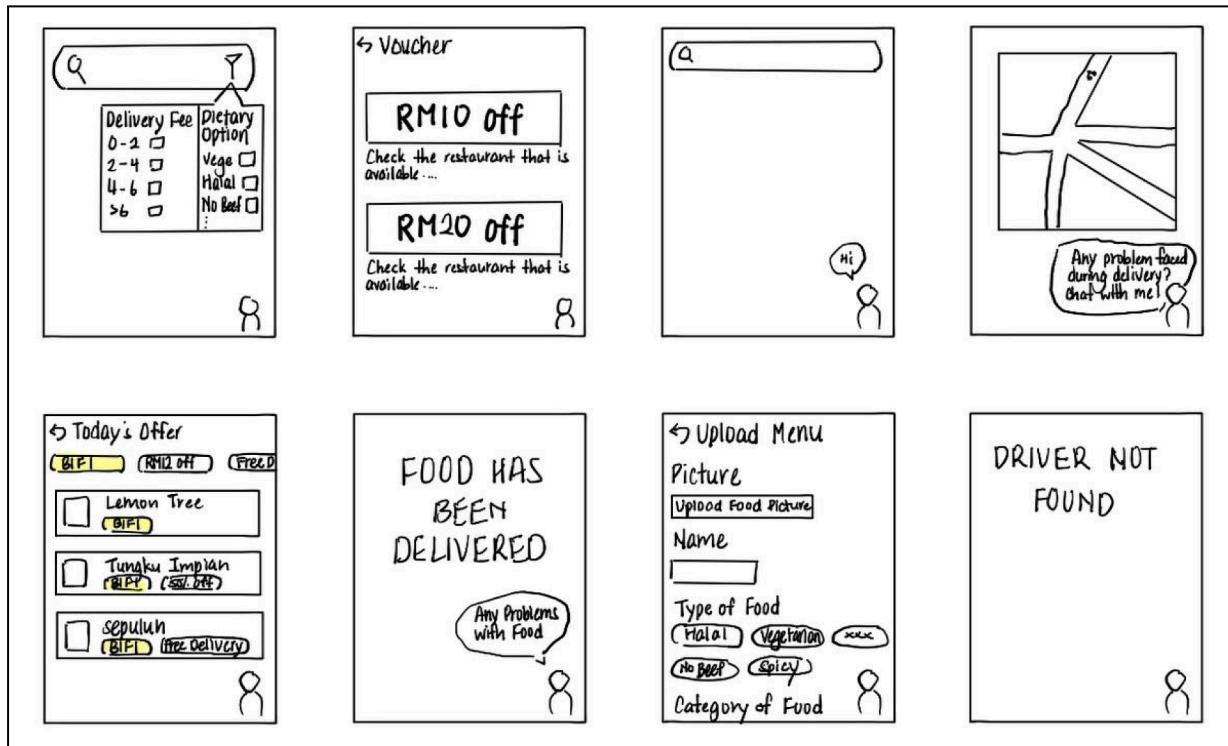


Figure 4: Alternative Design 1

## 2.2 Alternative Design 2 –Evelyn Ang

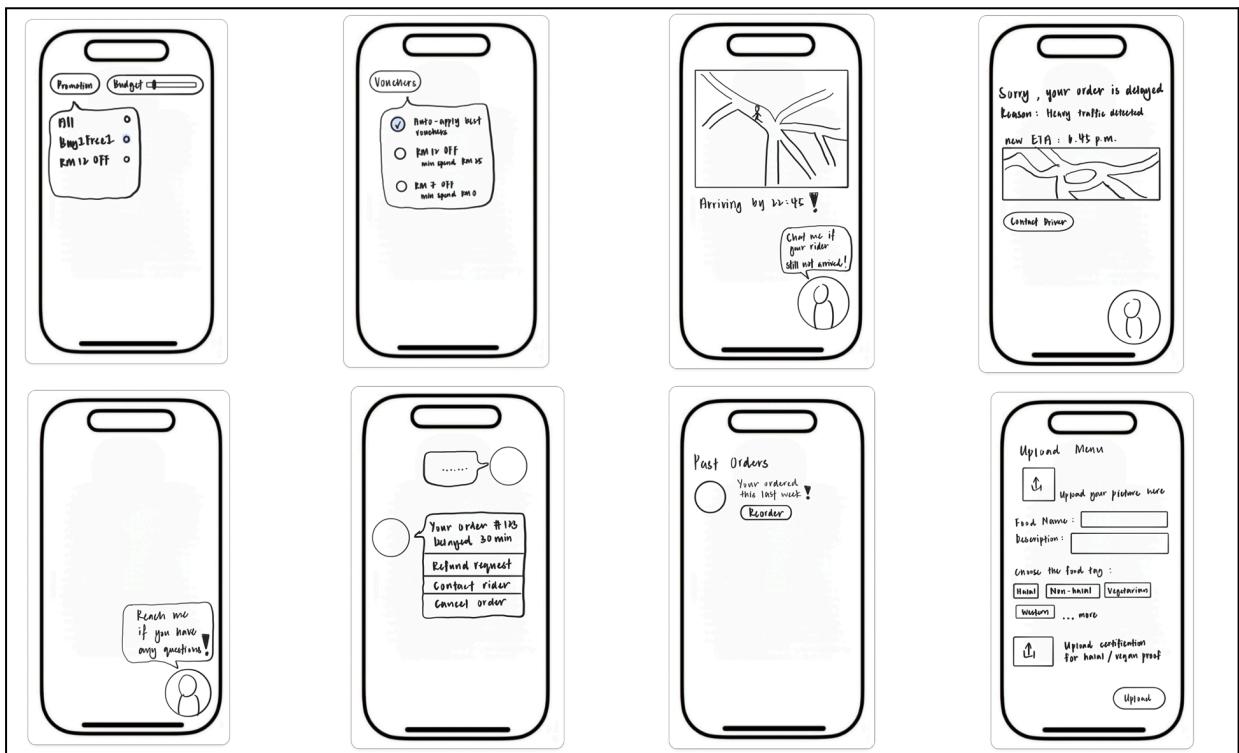


Figure 5: Alternative Design 2

### 2.3 Alternative Design 3 –Tan Xin Tian

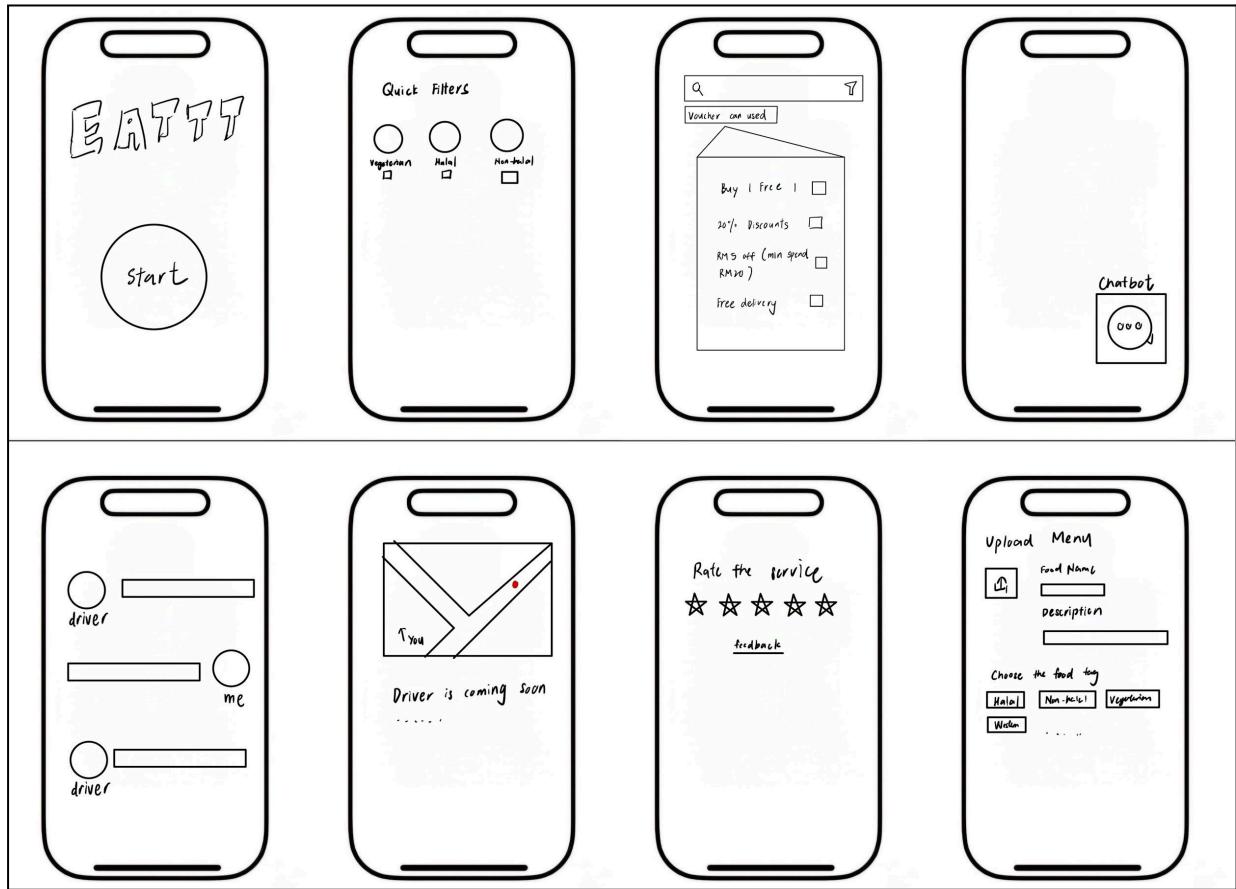


Figure 6: Alternative Design 3

## 2.4 Alternative Design 4 –Teoh Xin Yee

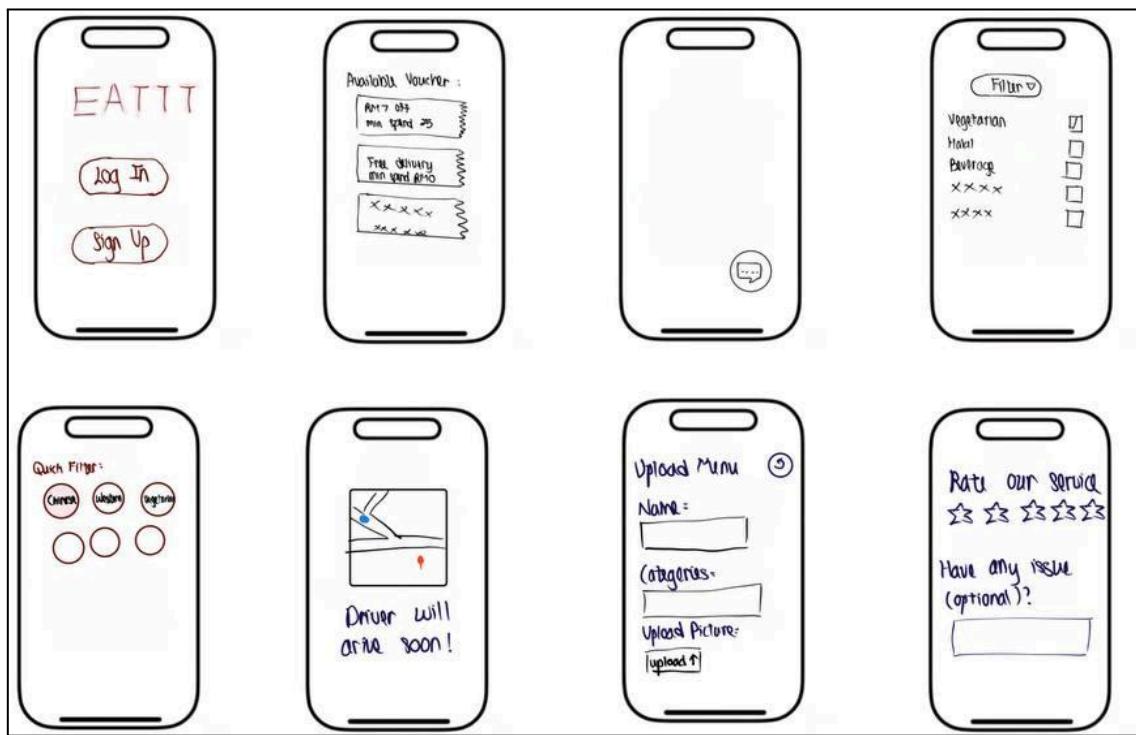


Figure 7: Alternative Design 4

## 2.5 Alternative Design 5 –Toh Shee Thong

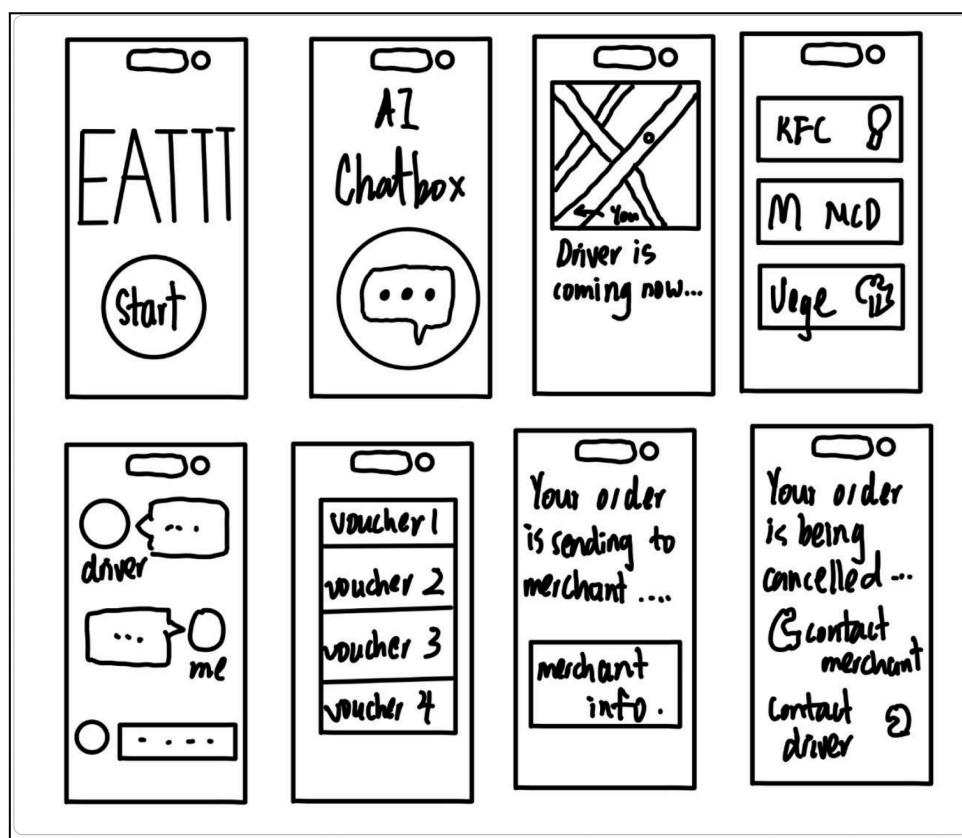


Figure 8: Alternative Design 5

### 3.0 Voting for Best Design

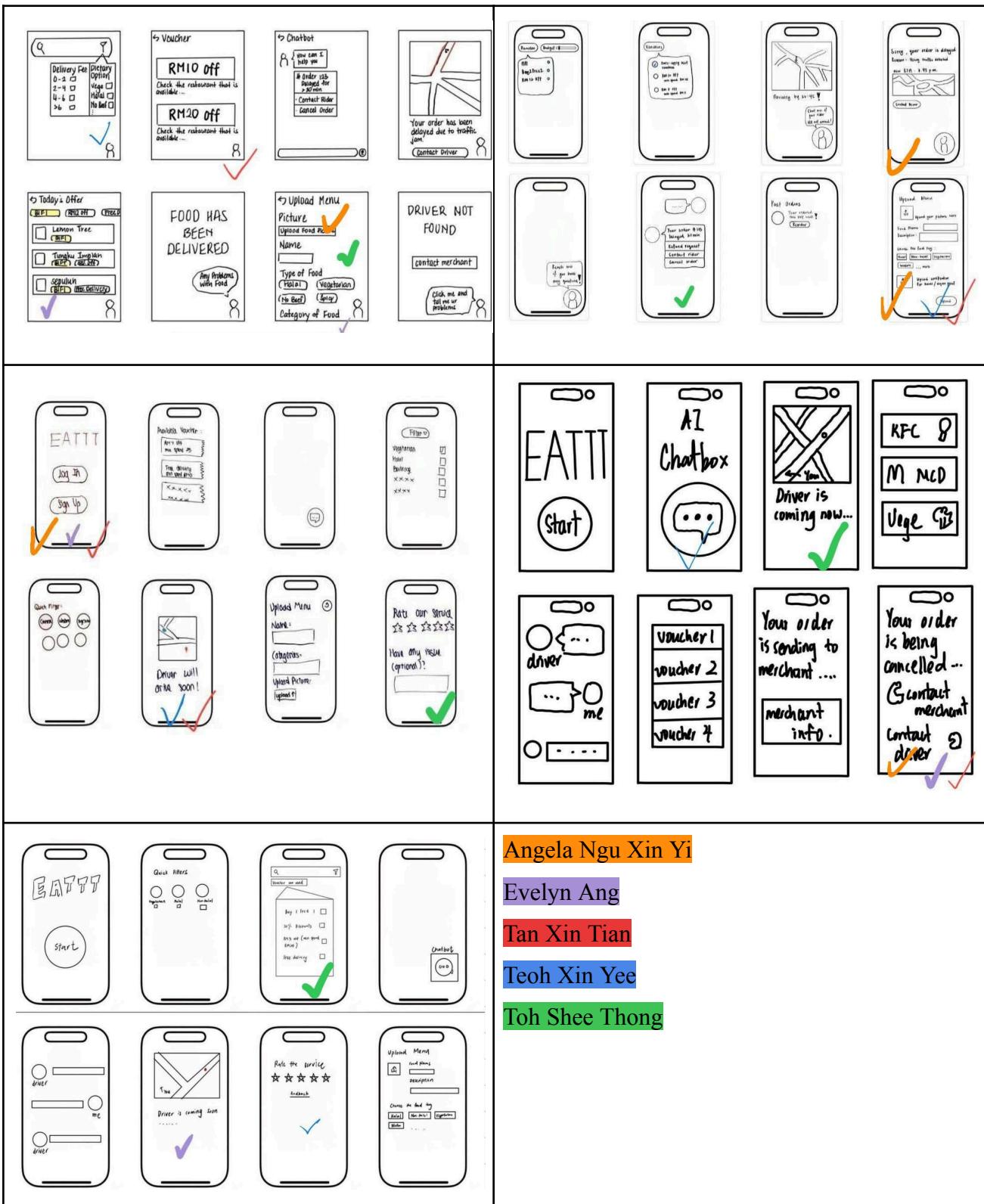


Figure 9: Voting for Best Design

Angela Ngu Xin Yi

Evelyn Ang

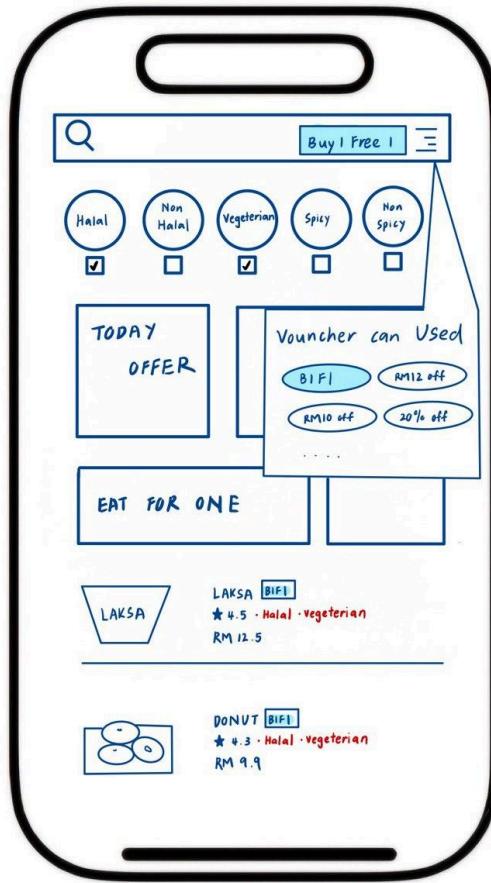
Tan Xin Tian

Teoh Xin Yee

Toh Shee Thong

## 4.0 Wireframes

### 4.1 Task 1- Order Food



**Figure 10: Wireframe for Task 1(Order Food)**

The Task 1 (Order Food) wireframe is designed to quickly find meals that meet their preferences within a short period. This design applied Shneiderman's Golden Rules, Gestalt Principles, and some of the key usability and UX goals.

#### **Shneiderman's Golden Rules:**

##### **Rule 1 – Strive for consistency**

All filter buttons (e.g., Halal, Non-Halal, Vegetarian, Spicy) follow a circular shape and consistent icon layout, allowing users to quickly scan and compare available options.

##### **Rule 4 – Design dialogs to yield closure**

The "Voucher Can Be Used" panel appears when the user clicks on the filter icon at the end of the search bar. This step provides immediate feedback as to which promotions are available. By showing this confirmation dialog, users are reassured and informed, receiving psychological closure prior to checkout.

## **Rule 5 – Prevent errors**

Clear food labels such as “Halal,” “Vegetarian,” and voucher types like “B1F1” are displayed directly besides each item name. This allows users to immediately identify whether the food matches their needs and available promotions.

## **Gestalt Principles:**

### **1. Similarity**

All filter buttons and food items are drawn in similar shapes and font styles, allowing users to easily recognize categories and options.

### **2. Proximity**

Each item (e.g., "Donut" or "Laksa") is grouped with its name, rating, price, and tags closely together, forming clear information units.

### **3. Figure-Ground**

Strong contrast between the background and the interface items makes it easy for users to differentiate key information such as prices and voucher captions. Clear visual separation allows the most important content to stand out and be read at a glance.

## **Usability & User Experience Goals:**

- Effectiveness**

Users can directly access all filters and voucher details before checking out, solving the issue faced by users where discounts were hidden until the end.

- Efficiency**

Tag-based filtering allows users to find meals that meet multiple requirements without scrolling endlessly.

- Satisfaction**

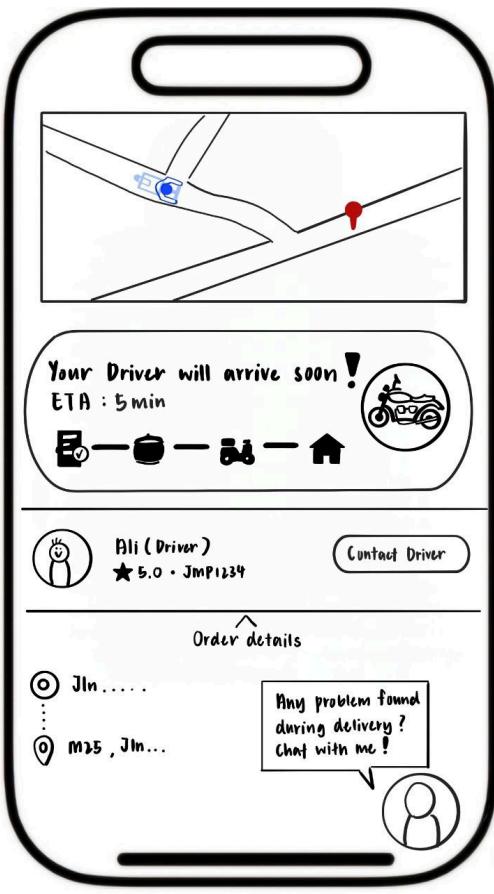
Visually categorized sections like “Today Offer” and “Eat for One” reduce cognitive load and increase confidence in making decisions quickly.

- Error Prevention**

Filter selections such as “Halal” and “Vegetarian” are always visible and editable. This prevents users from accidentally selecting meals that don’t match their needs.

The design requirement to add a voucher information button allows users to view applicable discounts before checkout. The filter tags like “Halal” and “Vegetarian” allows users to quickly find meals that match their dietary needs.

## 4.2 Task 2 -Monitor and Manage Order Status



**Figure 11: Wireframe for Task 2 (Monitor and Manage Order Status)**

Several of Shneiderman's Golden Rules, Gestalt principles, and required usability and user experience goals were successfully utilised in the task 2 (monitor and manage order status) design.

### Shneiderman's Golden Rules:

#### Rule 2 - Seek universal usability

By using universally recognised shape of icons for the live chat button, all users will be able to use this feature without problems.

#### Rule 3 - Offer informative feedback

ETA, map, and delivery progress graphics provide users with clear, consistent system feedback on the status of their order.

#### Rule 4 - Design dialogs to yield closure

The delivery progress bar gives a sense of completion, and feedback prompts after delivery offer closure to the process.

## **Gestalt Principles:**

### **1. Proximity**

- Related elements such as map, ETA and vehicle icons are grouped together, allowing users to quickly associate delivery progress with visual cues.
- Driver details and the “Contact Driver” button are positioned closely to one another, reinforcing their functional relationship.

### **2. Similarity**

- The use of consistent icons (e.g., vehicle, house, pot) helps users recognize stages in the delivery process quickly and help to reduce confusion.

### **3. Figure-Ground**

- The persistent chat icon and message bubble stand out from the background allowing users to easily locate support options when needed.

### **4. Continuity**

- Users' attention is naturally guided by the delivery path visualisation, which follows a logical, linear path (order → food → bike → house).

## **Usability & User Experience Goals:**

### **1. Effectiveness**

- Real-time driver tracking and ETA displayed in minutes let users feel informed and reassured, especially during delays.
- Clear access to contact and support features increases task success rates in unforeseen circumstances.

### **2. Efficiency**

- Users are able to contact the driver directly or use the support chat from the same screen, saving time spent switching between screens in the app.

### **3. Satisfaction**

- Simple and intuitive design minimizes cognitive load, making the users' experience more convenient and enjoyable.

### **4. Learnability**

- Use of simple icons and standard UX patterns (map, ETA, driver card) helps first-time users understand functions without any need for tutorials.

This design retains the real-time rider tracking with a clear map and ETA but replaces vague status messages with specific updates and delivery stage icons to reduce user anxiety. Besides, a persistent and context-aware help chatbot is added directly on the screen, eliminating the need for users to navigate through multiple menus for support. In order to ensure accountability, rider details such as name, rating and vehicle plate number are clearly shown. This interface directly addresses the key usability concerns identified in user feedback.

### 4.3 Task 3 - Upload menu

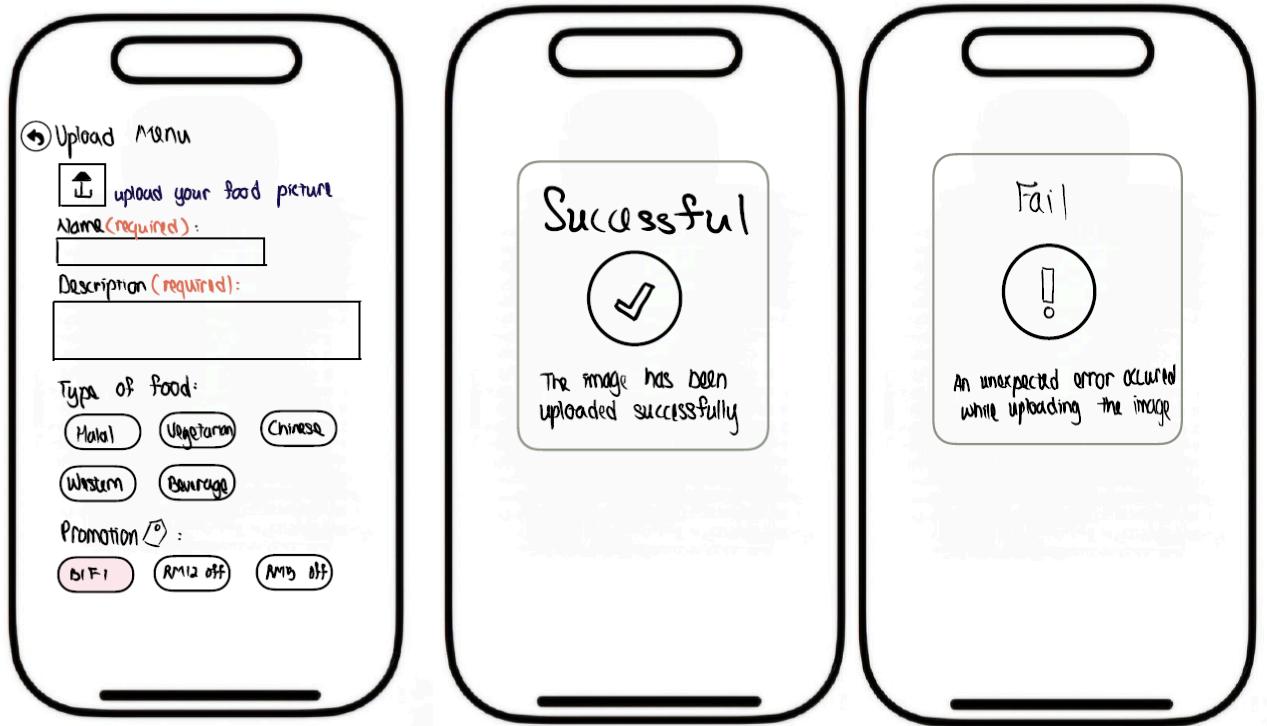


Figure 12: Wireframe for Task 3 (Upload Menu)

This task 3 wireframe optimizes the upload menu for efficiency and usability by incorporating Shneiderman's Golden Rules, Gestalt Principles, and key UX design goals.

#### Shneiderman's Golden Rules

##### Rule 1 - Strive for Consistency

The form fields ("Name," "Description," "Type of Food") follow a consistent layout with clear labels and required field indicators. Buttons like "Halal," "Vegetarian," "Chinese," etc., use a uniform style, though their grouping could be improved for clarity.

##### Rule 3 - Offer informative feedback

Success and error messages are prominently displayed ("Successful" / "Fail") with concise explanations ("The image has been uploaded successfully" / "An unexpected error occurred"). Feedback is immediate, ensuring users understand the outcome of their action.

##### Rule 4 - Design dialogs to yield closure

The success message provides clear closure after uploading, confirming the task is complete.

## Gestalt Principles:

### 1. Proximity

- Related fields (e.g., "Name" and "Description") are grouped closely, distinguishing them from the "Type of Food" options.
- The food type buttons ("Chinese," "Western," etc.) are placed near each other

### 2. Similarity

- The food type buttons share a consistent visual style (shape, color), helping users recognize them as interactive elements.

### 3. Figure-Ground

- The form fields stand out against the background, ensuring users focus on input areas.
- Success/error messages use high contrast (e.g., bold text) to draw attention.

### 4. Closure

- The form's structure implies a logical sequence (name → description → food type), guiding users to completion.

## Usability & User Experience Goals:

### 1. Effectiveness

Required fields are marked, reducing errors and feedback messages confirm actions, ensuring users know the system's state.

### 2. Efficiency

Minimal fields streamline the upload process.

### 3. Satisfaction

Clear success messages create a positive experience.

### 4. Learnability

Simple layout and familiar form design require no prior training.

This design enhances the menu upload system by adding dietary tags (e.g., 'Halal,' 'Vegetarian') to improve dish discoverability, along with an optional promotion feature for increased visibility.

## 5.0 Interaction Metaphors

### Metaphors 1 - Shopping Mall Flyer



**Figure 13: Shopping Mall Flyer from Wireframe Task 1**

The “Today Offer” section on the homepage works like a shopping mall’s promotional flyer - showing the latest deals upfront to attract attention of users and encourage fast decision.

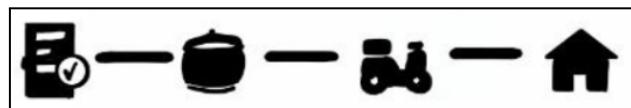
### Metaphors 2 - GPS Navigation



**Figure 14: GPS Navigation from Wireframe Task 1**

Filter tags such as “Halal” and “Vegetarian” act like a GPS which guiding users directly to the meals that match their preferences without getting lost in unrelated options.

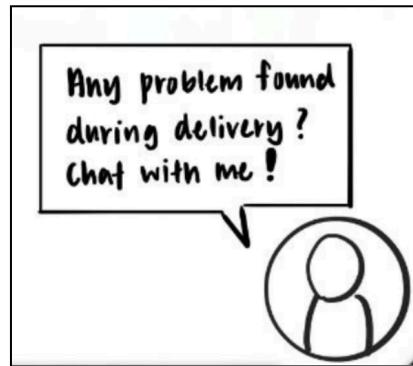
### Metaphors 3 - Progress Line



**Figure 15: Progress Line from Wireframe Task 2**

The horizontal delivery progress line resembles a road trip, with icons (e.g. motorbike, house) to represent different stages. This metaphor helps users mentally track progress step by step. Also, the house icon symbolizing the users’ delivery destination that represents users will get the food delivered to the door. The house symbol is universally understood and aligns with user expectations for delivery apps.

#### Metaphors 4 - Speech Bubble

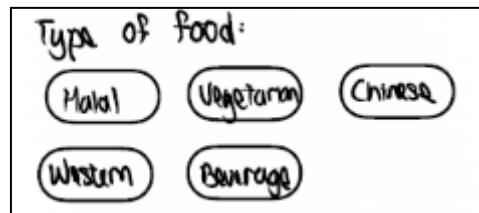


**Figure 16: Speech Bubble from Wireframe Task 2**

The message is shown in a speech bubble, mimicking text messaging conversation cues.

This metaphor encourages interaction by making support feel conversational and human-like. It lowers the barrier for users to seek help and aligns with expectations from messaging platforms.

#### Metaphors 5 - Choose your Serving Platter



**Figure 17: Serving Platter from Wireframe Task 3**

Selecting the food type is like choosing the right platter or plate for the dish you're about to serve. Just as different meals go on different serving sets (e.g., a bowl for soup, a bamboo basket for dim sum), food categories are the “presentation style” of your dish.