Project Title: # Travel Buddy! - Trip Planning Assistant

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1. Website Selection:

The website we chose for a front-end redesign was Kayak, the popular travel booking website. This website similarly allows users to plan a trip, however, it's much more geared towards actually booking a trip rather than planning the details of a trip. Regardless, there are some areas of the front end design that we feel as though we can improve upon. While it's useful that Kayak has so many different features, having them all laid out in the sidebar and home page can make the website feel a little cluttered. To fix this, we would keep our menu design relatively simple and minimalistic, while still giving users a large amount of detail and customization options within each menu option. In addition, Kayak loves to push ads for other products, either from other companies or themselves, which is always frustrating for users, so we will not be implementing any form of ads to allow users to solely focus on their trip planning.

2. Design Concept:

Target Audience:

- Individuals looking for a structured, visual, and secure way to plan trips, avoiding scattered notes and multiple apps.
- Mid-tier travelers who plan 1+ trips at a time and require an organized itinerary.
- Frequent travelers needing a centralized place to track their flights, accommodations, activities, and expenses.
- Users who prefer a digital, calendar-based planning tool with easy modifications to their itinerary.

Purpose of the Website:

- To provide an all-in-one travel itinerary planner where users can create, edit, and manage trips easily.
- To allow users to securely register and log in with an email and password to save their trips.
- To enable a structured trip creation process; users can input trip details such as dates, destinations, accommodations, and activities.
- To provide a calendar view for easy visualization of trips.

- To include a recommendations page where users can search for destination-based suggestions.
- To include a countdown feature on the homepage for upcoming trips.

Specific Requirements and Features:

Security and Authentication:

- JWT-based authentication for email/password

Core Pages and User Flow:

Starting Page:

- Users are greeted with a minimalist homepage featuring "Login" and "Register" buttons.
- Header ("Travel Buddy Header") and footer for navigation.

Authentication (Login, Register, Forgot Password Pages):

- Login Page: Users input username/email and password to sign in.
- Register Page: Requires username, email, password, and confirm password fields, password hashing ensures security.
- Forgot Password Page: Users enter their email to reset their password via email link.

Dashboard/Homepage:

- Displays "Your Trips" in a card format, each with trip name, countdown timer to the start of the trip, and quick access buttons to edit or delete a trip.
- A navigation bar includes links to Home, New Trip, Calendar View, and Recommendations.

New Trip Page:

- Users can create a new trip by entering the trip title, start and end dates, description/notes, and clicking the save button to store trip details.

Edit Trip Page:

- Users can modify an existing trip, including adding, removing, or updating trip details such as activities, transportation, and accommodation.
- Each day's plan is structured, showing dates and estimated costs.
- "Save Changes" button is available to update the itinerary.

Calendar View Page:

- A visual representation of all planned trips.
- Users can click on dates to view trip details.
- Scrollable month-by-month navigation to browse past and future trips.

Recommendations Page:

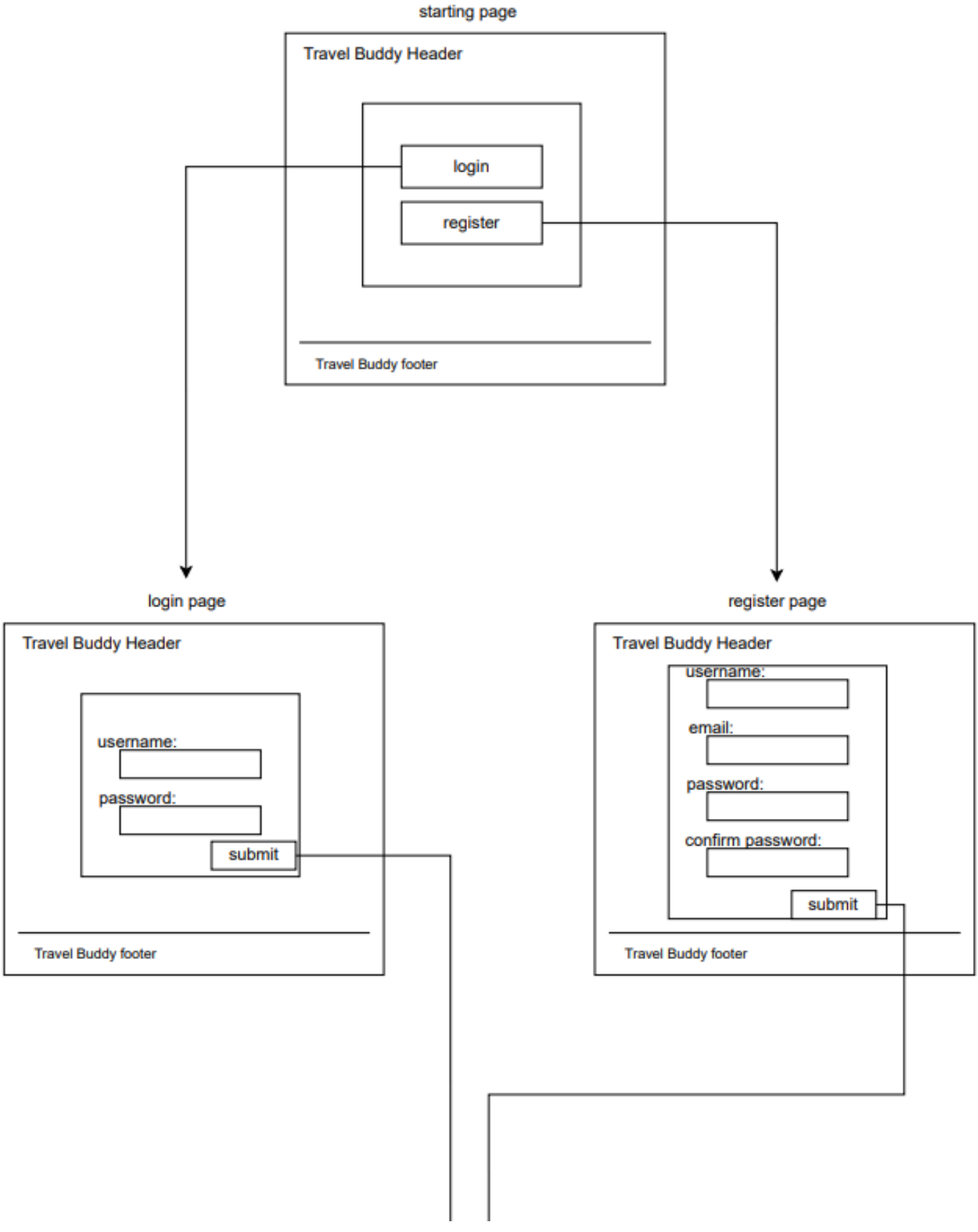
- Users search for a city or country to receive travel suggestions.
- The system provides recommendations on activities, restaurants, or sightseeing spots.
- Chat-like interface box to interact with the recommendation system.

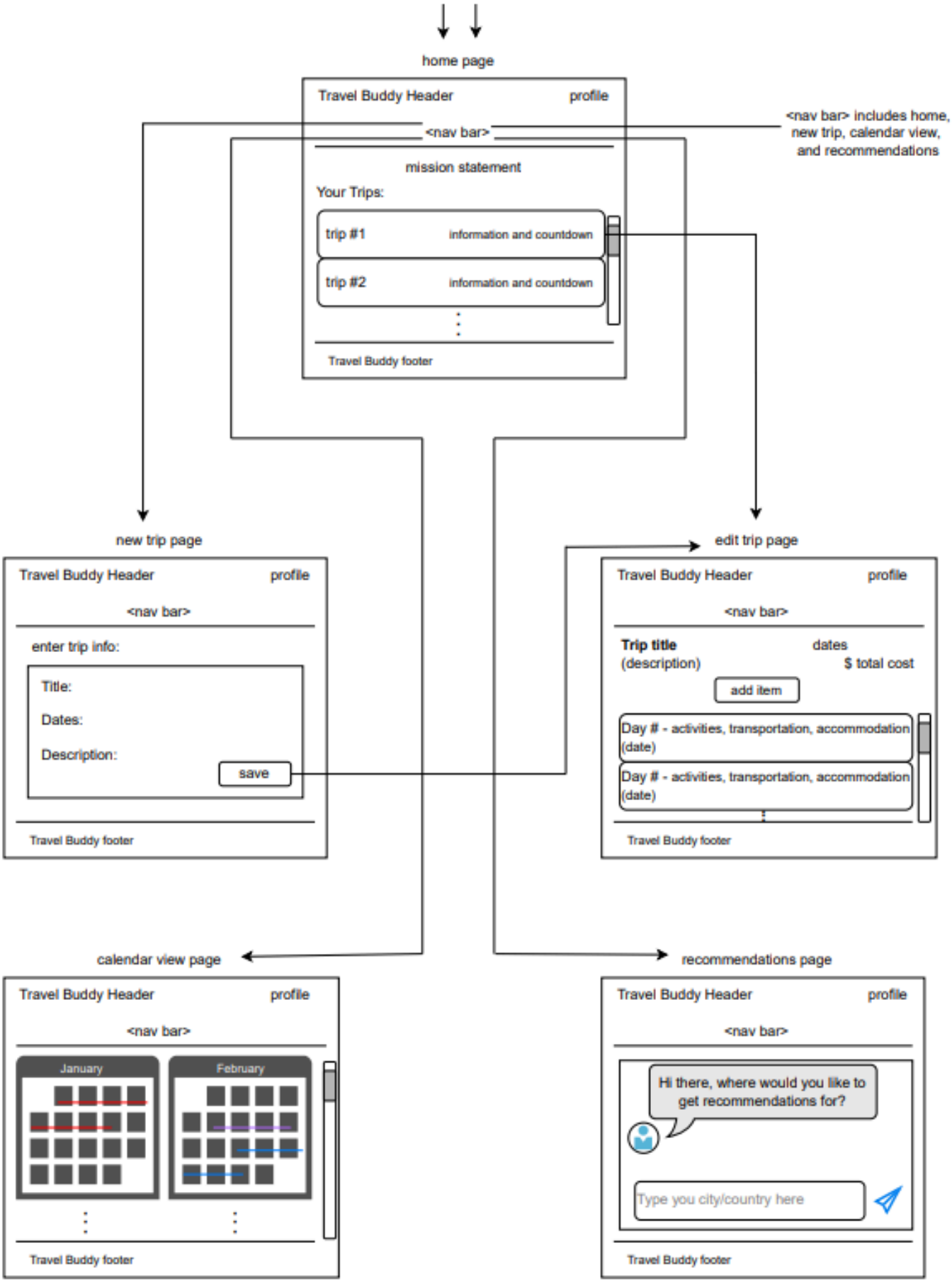
Constraints:

- Must be responsive across desktop and mobile devices.
    - The UI layout must adjust dynamically based on the screen's viewport size.
- The User input fields (e.g., login, trip creation) will need to include user-side validation before submitting the data to the backend.
    - Need to provide error messages and form validation feedback for incorrect and or missing fields.
- Handle API responses, ensure error messages are displayed correctly to the users.

3. Draw.io Setup: Draw.io was used for the wireframing, but we will be using Figma for the actual frontend design

4. Wireframing:
https://drive.google.com/file/d/1PzuY8xHpNL9muh2wKjiMAqTC8LwZbLX5/view?usp=drive_link
(screenshots below are a little blurry, but click the link for full diagram)

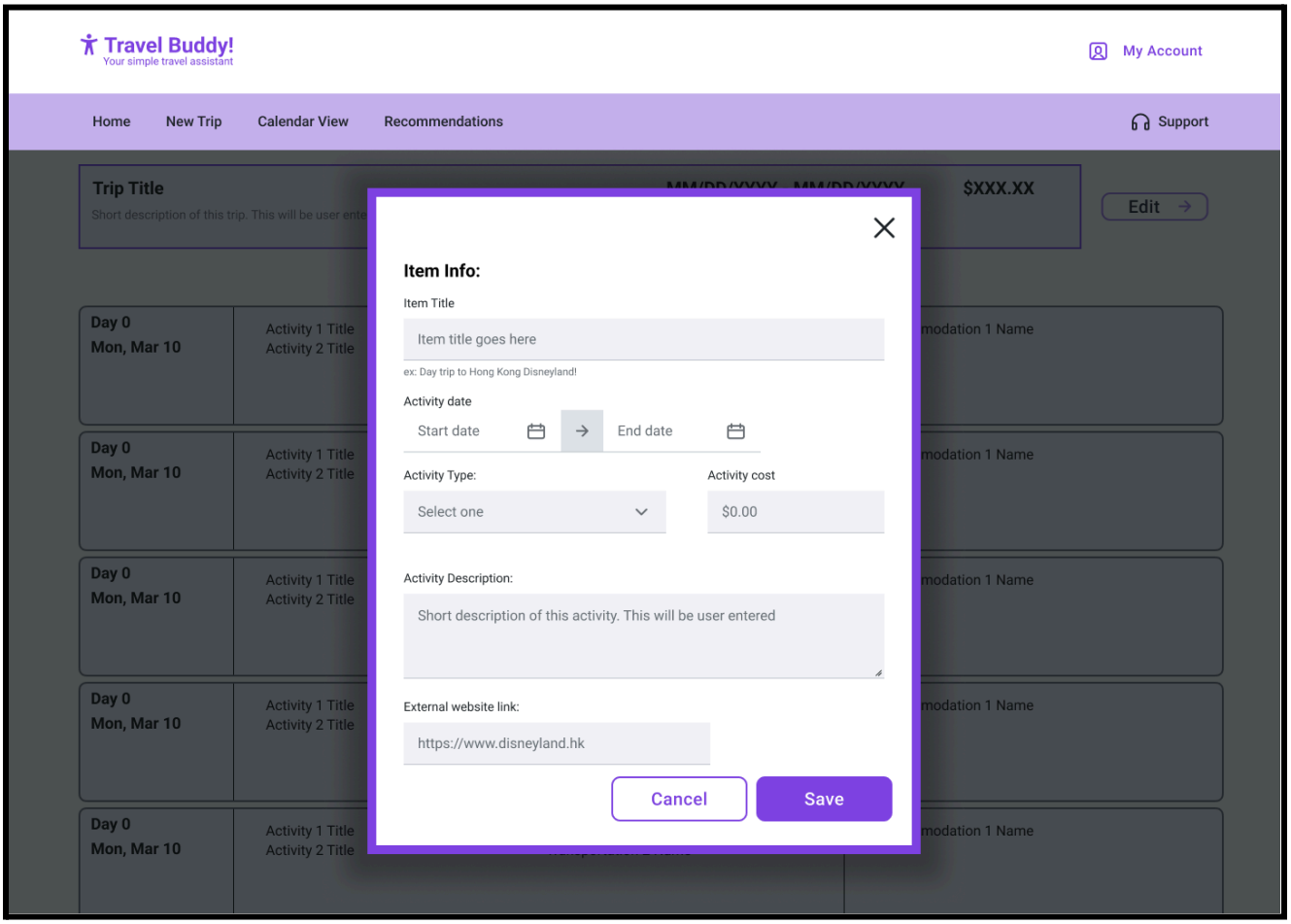

starting page
Travel Buddy Header
login
register
Travel Buddy footer
login page
Travel Buddy Header
username:
password:
submit
Travel Buddy footer
register page
Travel Buddy Header
username:
email:
password:
confirm password:
submit
Travel Buddy footer


home page
Travel Buddy Header
profile
<nav bar>
<nav bar> includes home, new trip, calendar view, and recommendations
mission statement
Your Trips:
trip #1
information and countdown
trip #2
information and countdown
Travel Buddy footer
new trip page
Travel Buddy Header
profile
<nav bar>
enter trip info:
Title:
Dates:
Description:
save
Travel Buddy footer
edit trip page
Travel Buddy Header
profile
<nav bar>
Trip title
(description)
dates
$ total cost
add item
Day # - activities, transportation, accommodation (date)
Day # - activities, transportation, accommodation (date)
Travel Buddy footer
calendar view page
Travel Buddy Header
profile
<nav bar>
January
February
Travel Buddy footer
recommendations page
Travel Buddy Header
profile
<nav bar>
Hi there, where would you like to get recommendations for?
Type you city/country here
Travel Buddy footer

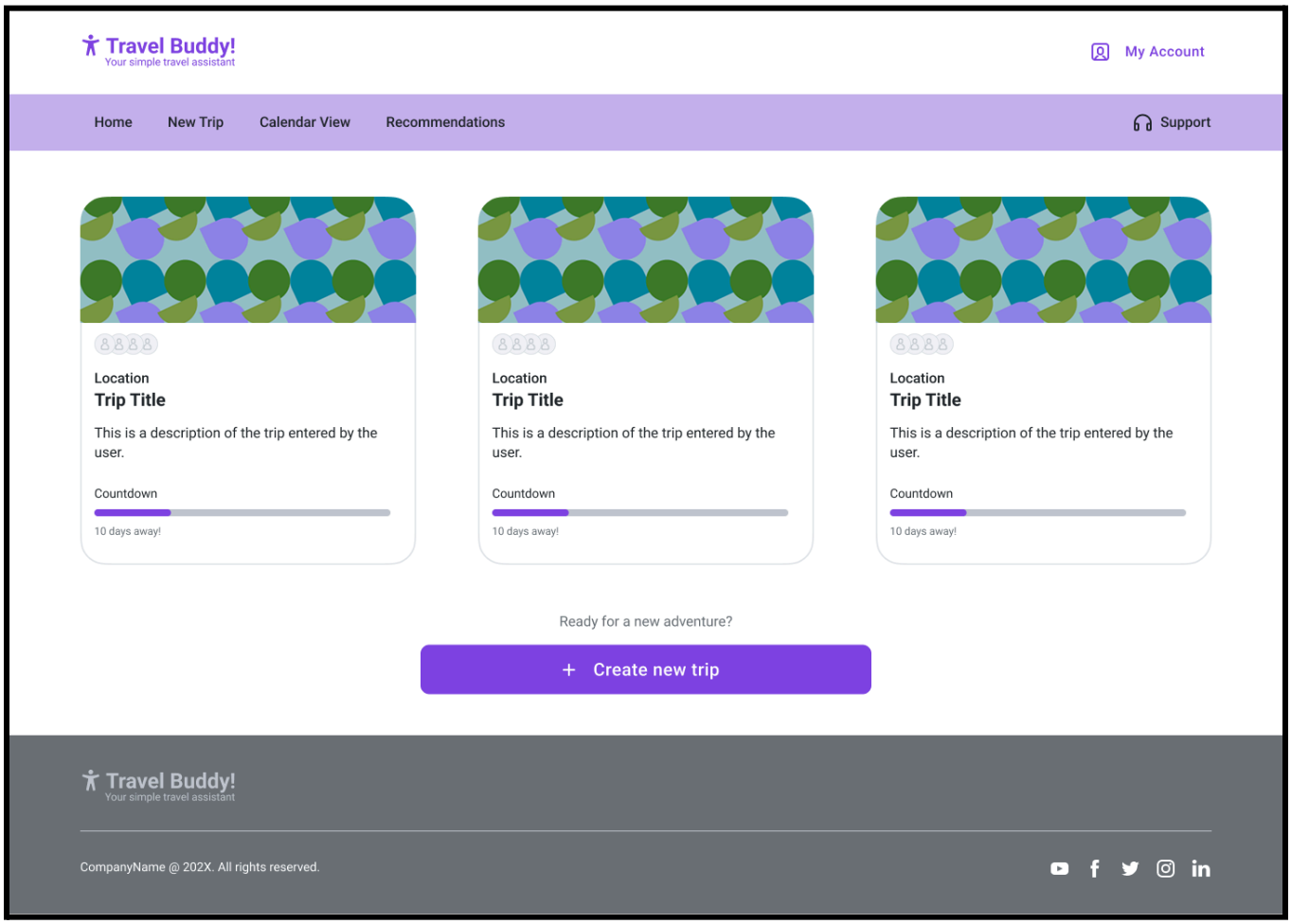
5. Visual Design:
Figma wireframe link:
https://www.figma.com/design/eoQrVj2vbubC6sjgkxWfAt/TravelBuddyWireframe?node-id=3102-16362&t=iViatomaqsO3A8SS-1

For documentation, we've also provided some screenshots with short descriptions.

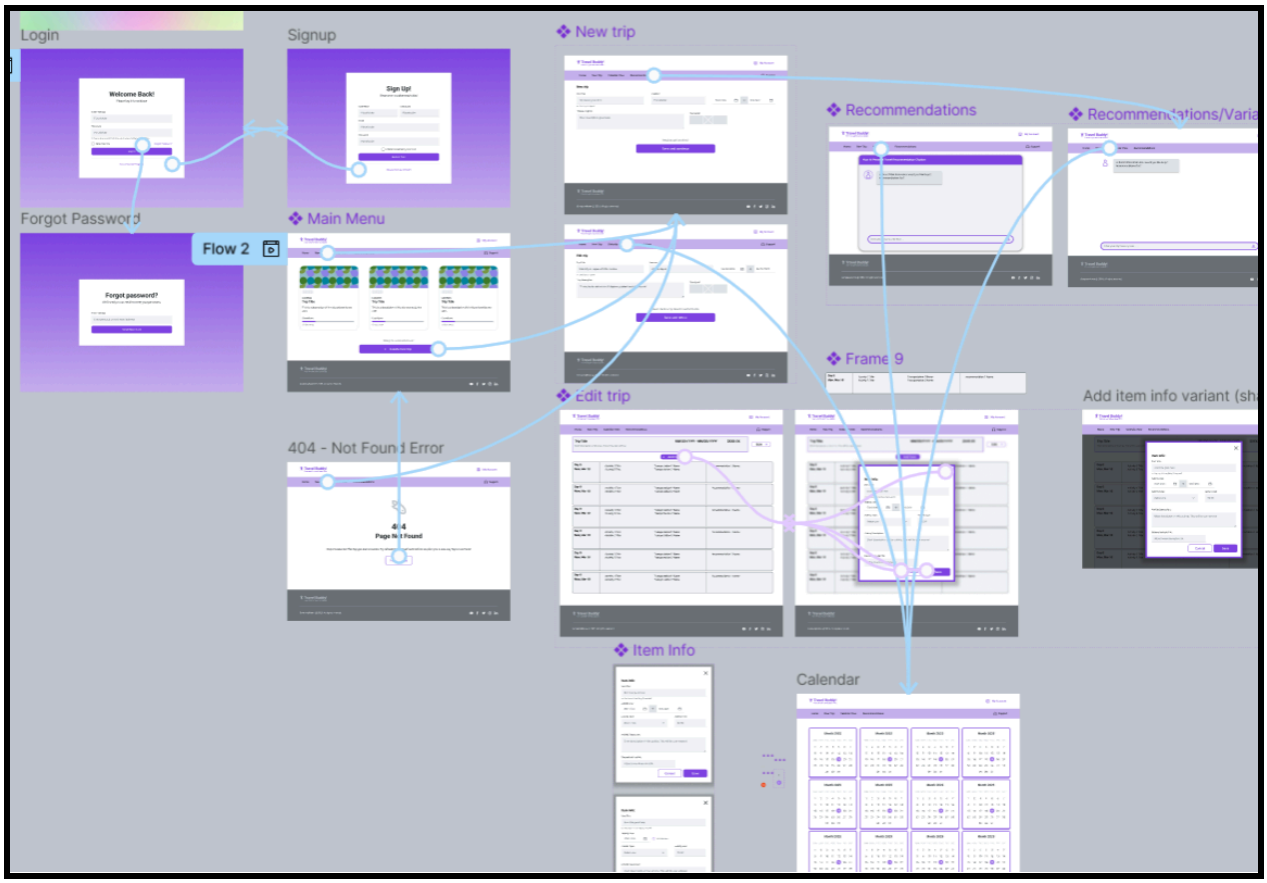
Creating a new item to add to trip details



The home page: Contains all user created trips with trip descriptions. Clicking on a specific one directs you to the trip details page.



An example of some of the flows between pages:
(For a more comprehensive flow, refer to the draw.io diagram)



(Some of the Figma flow triggers and transitions are missing because some of the component pieces weren't cooperating. Please refer to the draw.io diagram for a better understanding.)

7. Documentation:

Our design choices and decisions:

- We defined component values in our design tokens page to establish a template for what each field looks like. This not only maintains consistency between pages, but it also keeps a clean reference for designing new components in our front end design. Our approach to design was driven by the philosophy that great design feels invisible—it anticipates user needs, solves problems, and makes tasks simple. By adhering to this principle, we ensured that our design choices enhance usability without being obtrusive.

- In our design tokens, we prioritized two main elements: typography and colors.
    - Typography subparts include the font family, font type, font weight, font size, line height, and line spacing. We chose to use the Roboto typeface because of its simplicity and how it's generally quite flexible, great as a legible font with a modern aesthetic. The lack of stylistic quirks makes it

trustworthy and easy to seamlessly integrate on various digital platforms. Font type just includes many defined weights and sizes for the heading, subheading, body, and button types.
    - For the color schemes, we primarily kept a grayscale theme for most general UI elements–using a range from white to strengths of grey (10-100). To introduce a visual interest and maintain a clean aesthetic, we utilized three shades of purples as accent colors. The primary color is a strong purple (#7D43E1) while our secondary (#A279EA) and tertiary color (#C6AFEE) is just two lighter shades of the primary color for cohesion and accessibility.

- While designing and developing the front end design of the website, we utilized a basic front end wireframe template–complete with proper usage of components – provided by the Figma community to streamline how components, instances, and fields work together for a consistent implementation of similar elements.
    - By focusing on designing the fundamental components of the UI, such as headers, footers, form fields, buttons, and other essential interface elements, before incorporating them from the wireframe to the front end design, we significantly reduced the amount of trial and error and subsequent adjustments required.

- As an introduction to prototyping and interaction design, we defined a of the transitions involving establishing a few of the main triggers and resulting actions, including transitions between pages and components. This plans for early usability testing, helping refine workflows before actually being implemented when we begin developing our website.

- For layout and responsiveness, we selected an aspect ratio of 1080 x 720 pixels, a common practice for desktop layouts. It optimises responsiveness and accommodates varying screen sizes while maintaining a structured and predictable layout.

- Many good practices were picked up and considered when starting from a strong foundation of all of these principle elements used correctly, especially when defining components for simpler reuse throughout the design process.
    - Standardizing typography, color schemes, and component structures not only creates a cohesive user experience, but it allows for better design reusability on our end as developers. It helps for streamlining designs and better adjustment iterations.

    - Minimalistic and simple design principles prevent a cognitive overload for the user, ensuring that users can navigate the interface effortlessly. Accessibility, especially for clear readability of the web contents, enhances user experience with each of our design decisions, considering the end-user in mind. Our goal is a platform that's intuitive and frictionless to use.

- The design of *Travel Buddy!* will be tailored to fit our target audience of mid-tier travelers who need a visual and structured approach to travel planning.
- The Homepage aligns with our purpose by presenting the trips in easily digestible card format, each displaying essential travel details and a countdown timer to keep the users engaged with their travel plans.
- The New Trip and Edit Trip pages support trip customization, allowing the users to structure their travel itineraries efficiently, allowing them to add activities, accommodations, and transportation.
- The Calendar View page gives the user a visual timeline of their trips, making it easier to manage consecutive and or overlapping trips.
- The Recommendations page supports our purpose by offering destination-based travel suggestions, allowing the users to discover new travel experiences while planning their itinerary.
    - The chat-box interface for the recommendations provides a more engaging and aesthetic experience for the user.