

Plateful: plan, shop, eat, repeat.

GROUP 2-8 PROJECT ANALYSIS

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PROJECT DESCRIPTION

Title: Plateful

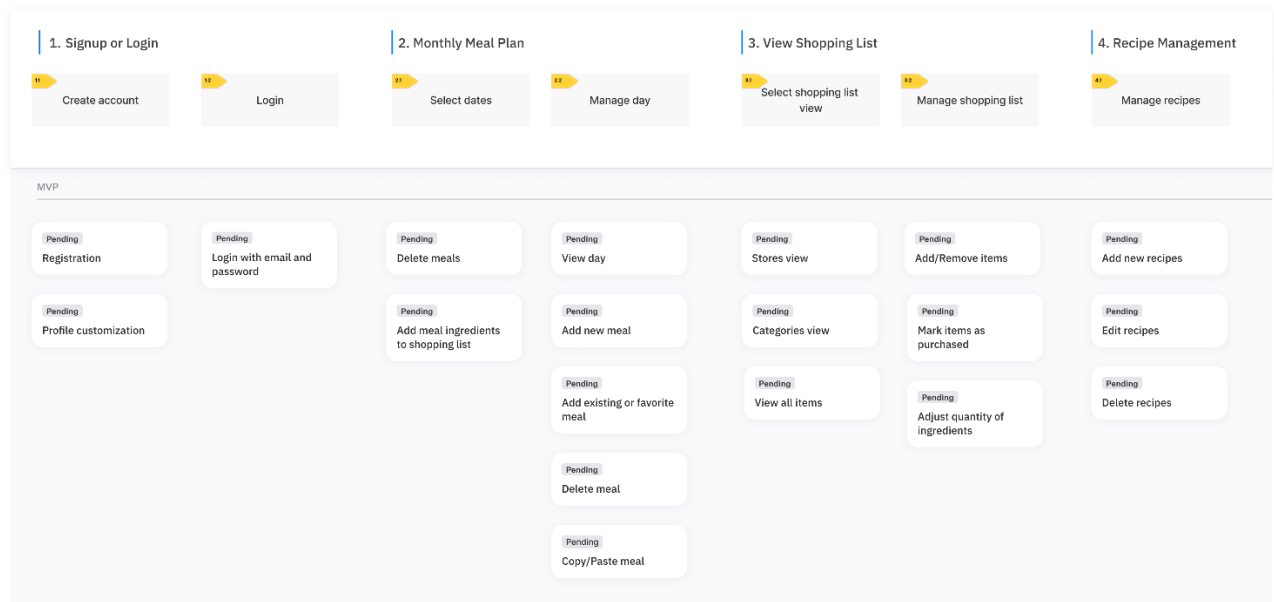
Description: Plateful is a personalized meal planning app that enables users to organize their monthly meals, store their favourite recipes, and manage shopping lists based on their meal plans. The app offers a fully customizable experience, where every recipe and meal plan are unique to each user, ensuring complete control over their meal choices and preferences.

Functional Requirements

Plateful will have the following core functionalities:

- Meal Planning:
 - Users can assign meals to specific days and generate a monthly overview
 - Users can copy or repeat meals across different days
- Recipe Management
 - Users can add, edit, delete, and store their recipes
 - Users can categorize recipes by type (e.g., breakfast, lunch, dinner)
 - Users can favourite recipes for quick access
- Shopping List
 - Users can manually select specific days from their meal plan to generate a shopping list
 - Users can manually add or remove items from the shopping list
 - Users can view the shopping list and toggle between entire list view, category view, or store view
- User Accounts & Personalization
 - Each user will have their own personalized account with unique recipes and meal plans.

STORY MAPPING (USER)



(SELECTED) USER STORIES

Story 1 – Signup

As a new user, **I want to** register for a Plateful account and customize my profile, **so that I can** start using the app.

Wireframe

The wireframe shows a web browser window titled "Plateful". Inside the window is a "Create Account" form. The form contains the following elements:

- Two input fields for "First Name" and "Last Name" side-by-side.
- A single input field for "Username".
- A single input field for "Email".
- A single input field for "Password".
- A single input field for "Repeat Password".
- A black button labeled "Sign-up".
- Below the button, the text "Already have an account? Login".

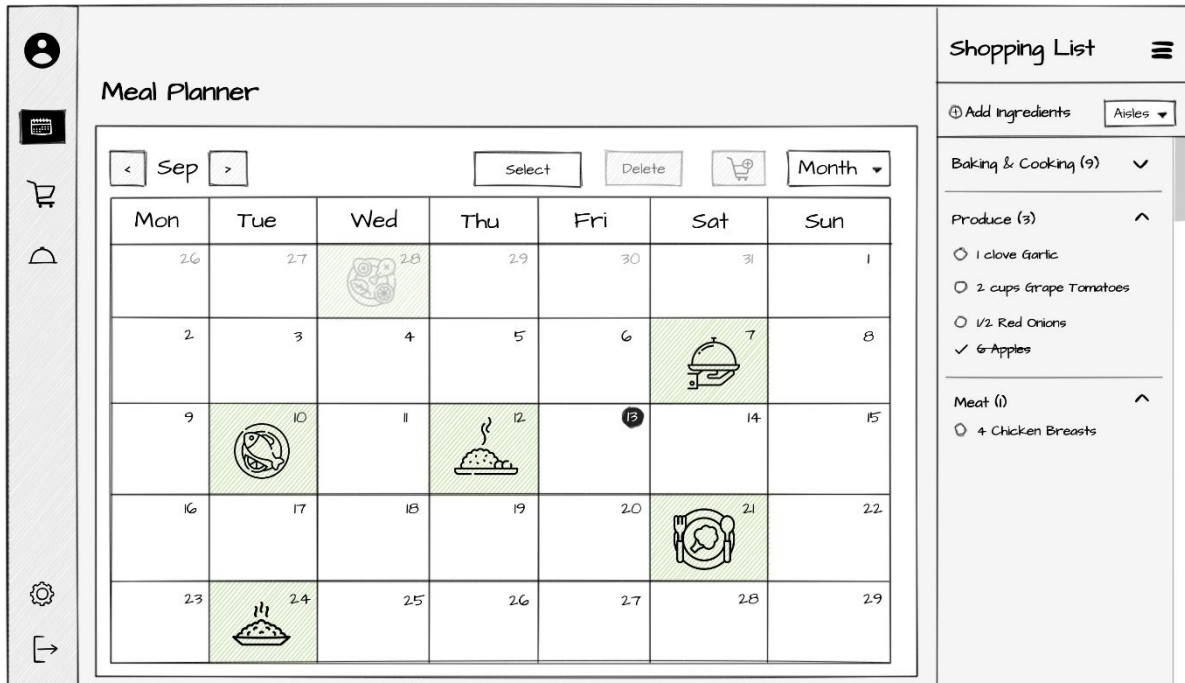
Acceptance Criteria:

- A user can create an account using a unique email address.
- The email must be validated to check if it is unique and properly formatted.
- If the email is already associated with an account, an error message is displayed: "Email already in use."
- The password must be at least 8 characters long, contain one uppercase letter, one number, and one special character.
- The password confirmation field must match the password entered. If the password does not match, an error is shown.
- All fields must be filled out to complete the registration. If any fields are left blank, an error is shown for each invalid field.
- Upon successful registration, the user is logged in and redirected to the home page (calendar).

Story 2 – Managing multiple dates

As a user, I want to select multiple days, **so that I can** add meals to my shopping list or delete multiple meals efficiently.

Wireframe:



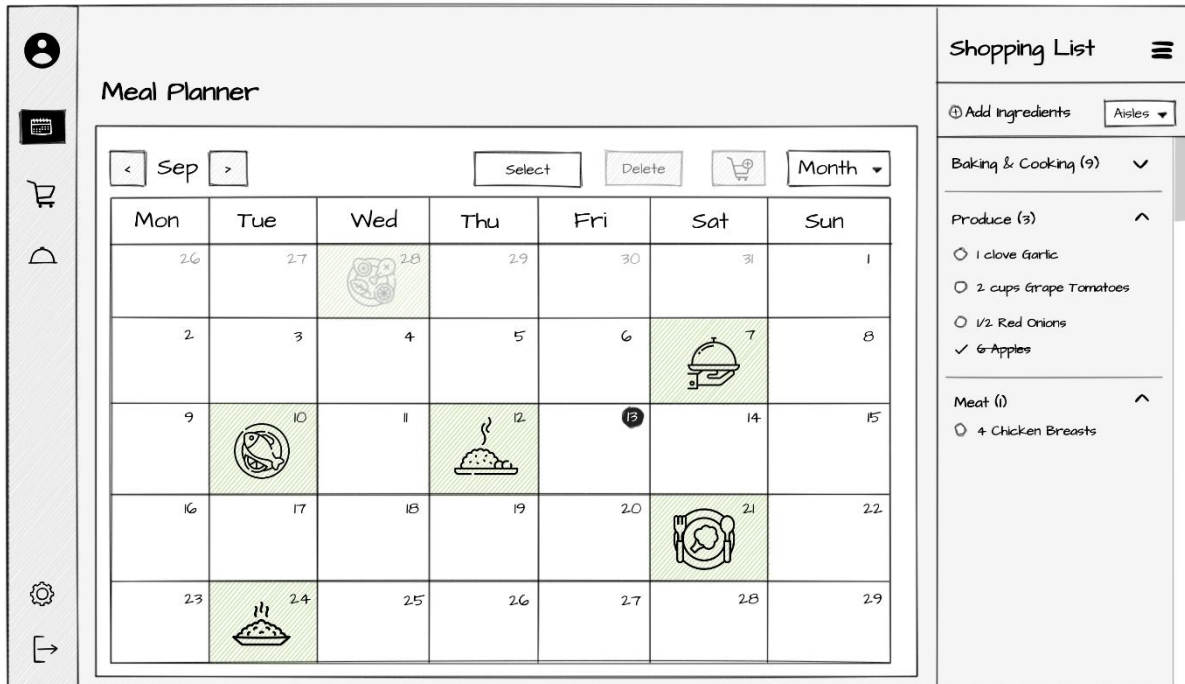
Acceptance Criteria:

- The calendar displays all meals per day in an overview with their names or pictures.
 - If the calendar fails to load meals, an error message is displayed: *"Unable to load meals. Please try again later."*
- Users can select one or multiple days on the calendar to perform bulk actions (deleting meals).
- Users can delete multiple meals across different dates at once.
 - If deleting the meals fails due to a system issue, display: *"Unable to delete meals. Please try again."*

Story 3 – Managing meals for individual days

As a user, I want to manage meals for a selected date, **so that I can** view, add, edit, delete, or copy meals for a specific day efficiently.

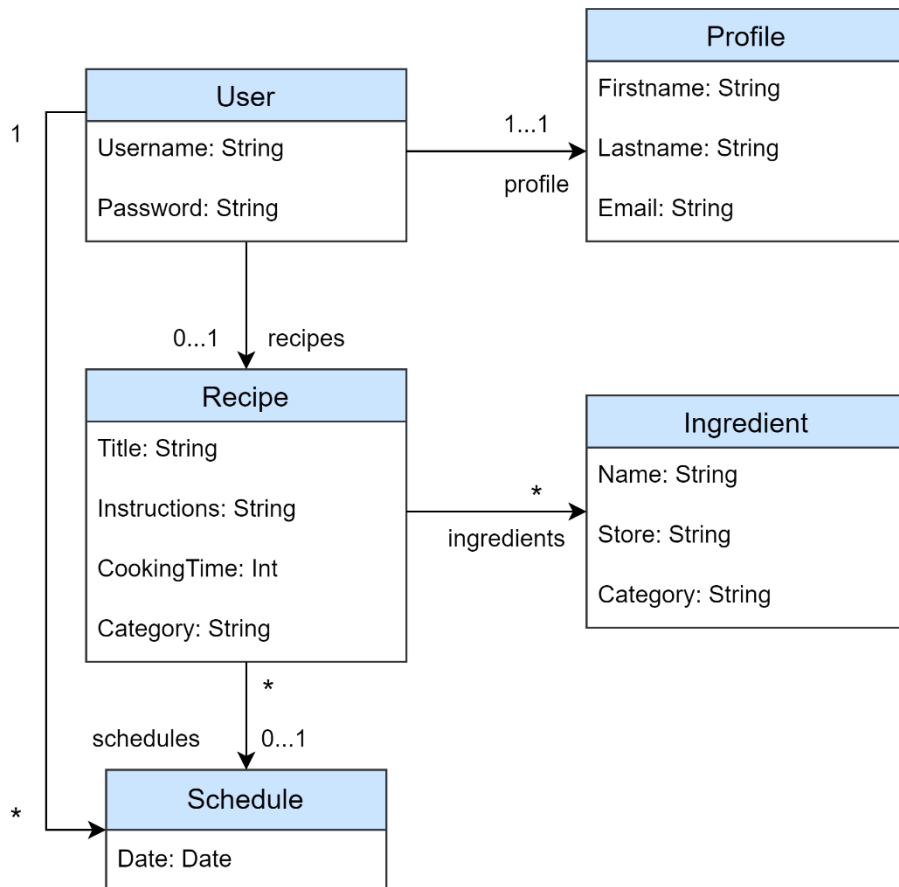
Wireframe:



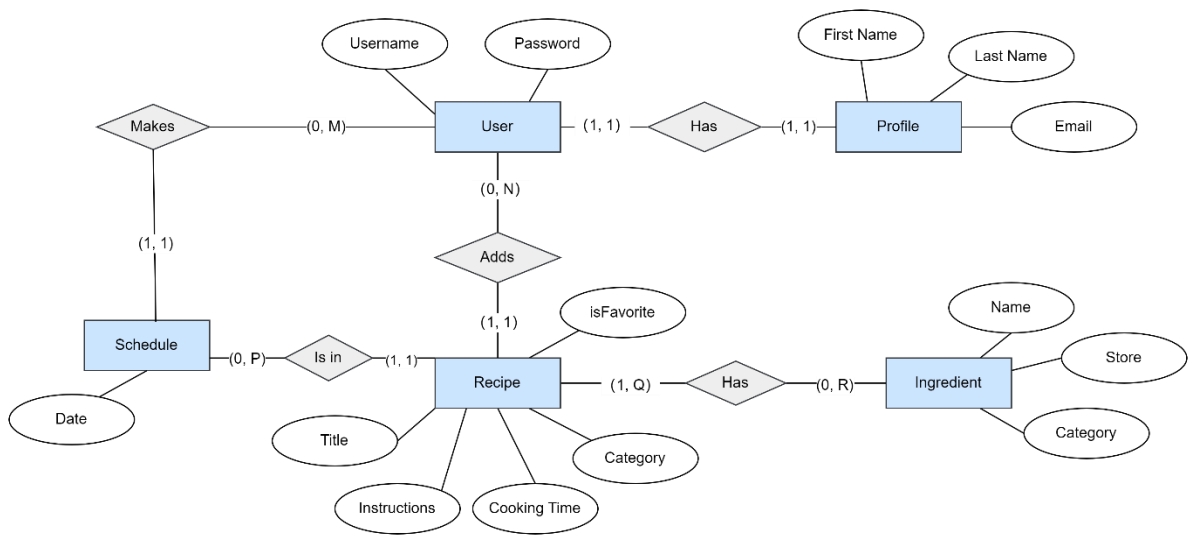
Acceptance Criteria:

- **Calendar View and Navigation:**
 - Calendar displays current month with days in a grid layout
 - Each day shows the date and meal icons/names if meals are planned (**GET**)
 - Users can navigate between months using arrow buttons
 - Current date is visually highlighted
 - Past dates are visually distinguished
- **Day View Functionality:**
 - Clicking a day opens a popup showing meals for that day (**GET**)
 - Meals are grouped by category (breakfast, lunch, dinner, snack)
 - Each meal displays: Title, Image (if available), Category, Cooking time, Favourite status, and a Delete button.
 - Empty days show "No meals planned for this day"
 - Users can close the popup via close button
- **Meal Management:**
 - Users can favourite/unfavourite meals (**PUT**)
 - Users can delete meals from a day (**DELETE**)
 - Changes are immediately reflected in the popup
- **Recipe Navigation:**
 - Meals in the day view are clickable
 - Clicking a meal navigates to a dedicated recipe page
 - Recipe page shows full details including ingredients and instructions
 - Navigation maintains state and allows returning to calendar view
- **Relationships:**
 - Schedule-Recipe (1-M) relationship ensures proper meal assignment to dates
 - Recipe-Ingredient (M-M) relationship maintains ingredient lists

DOMAIN MODEL



CONCEPTUAL MODEL



LOGICAL MODEL

