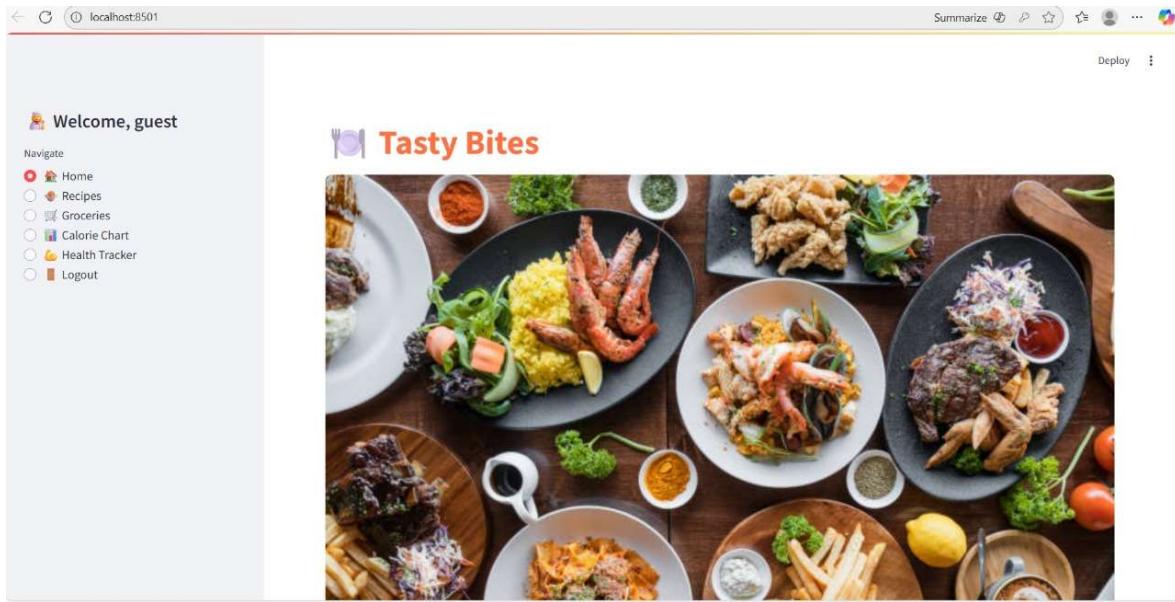


# TASTY BITES – UI/UX HACKATHON REPORT

A Smart Recipe, Calorie & Health Tracking Application



## Overview of the Tasty Bites Home Screen (Landing Page)

The Home Screen of the **Tasty Bites** 🍴 application serves as the user's first interaction point.

It introduces the purpose of the platform — meal tracking, healthy eating, daily calorie monitoring, and recipe discovery.

The design follows a **minimal and user-friendly layout**, helping users easily understand how the app assists in maintaining a balanced lifestyle.

### Description of the Home Screen

#### 1. Header & Navigation (Sidebar)

A compact sidebar provides access to major features:

- **Home** – Overview of the application
- **Recipes** – Explore categorized recipes with ingredients and calories
- **Groceries** – Suggests recipes based on available ingredients

- **Calorie Chart** – Visual calorie intake analysis
- **Health Tracker** – Calculate BMI & BMR
- **Logout** – Secure exit option

The sidebar is personalized with the user's name after login:  
**Welcome, (username)**

## 2. Hero Banner

A large banner showing healthy food imagery reinforces the theme:  
**Healthy Eating + Smart Monitoring**

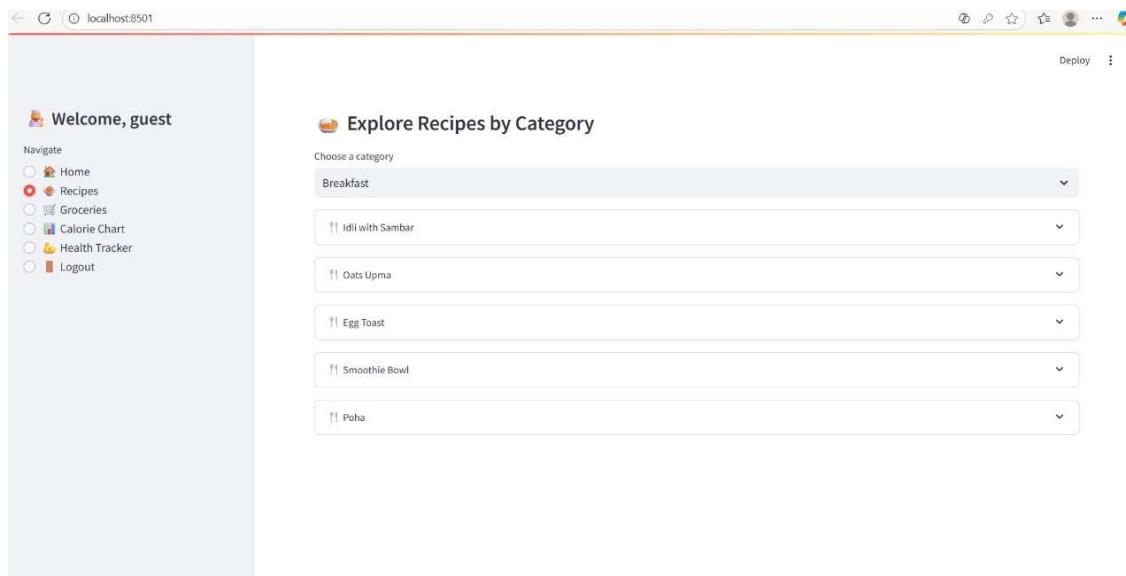
The home page provides a short info block explaining:  
“Track your meals, monitor calories, and explore healthy recipes.”

This makes the experience warm, welcoming, and contextual.

## 3. Purpose of the Home Page

The landing page aims to:

- ✓ Introduce users to the platform
- ✓ Communicate the health-focused value proposition
- ✓ Lead users toward actionable features like Recipes & Calorie Tracking
- ✓ Build trust and comfort through a clean aesthetic



# Overview of the “Recipes” Tab – Tasty Bites App

The **Recipes** tab enables users to explore a variety of meals categorized into:

- Breakfast
- Lunch
- Desserts
- Drinks

This screen encourages users to discover new dishes and integrate them into their daily meal planning.

## Detailed Description of the Recipes Screen

### 1. Category Selector

A dropdown menu displays all recipe categories.

Users choose one category → recipes are dynamically loaded.

### 2. Recipe Cards (Expandable Sections)

Each recipe is displayed inside an **expandable expander widget**, including:

-  **Recipe Name**
-  **Ingredients**
-  **Calories**
-  **Serves**
-  **Preparation Steps**

This makes browsing efficient and reduces screen clutter.

### 3. Add to Calorie Tracker Button

Each recipe has a button:

→ **Add to My Calorie Tracker**

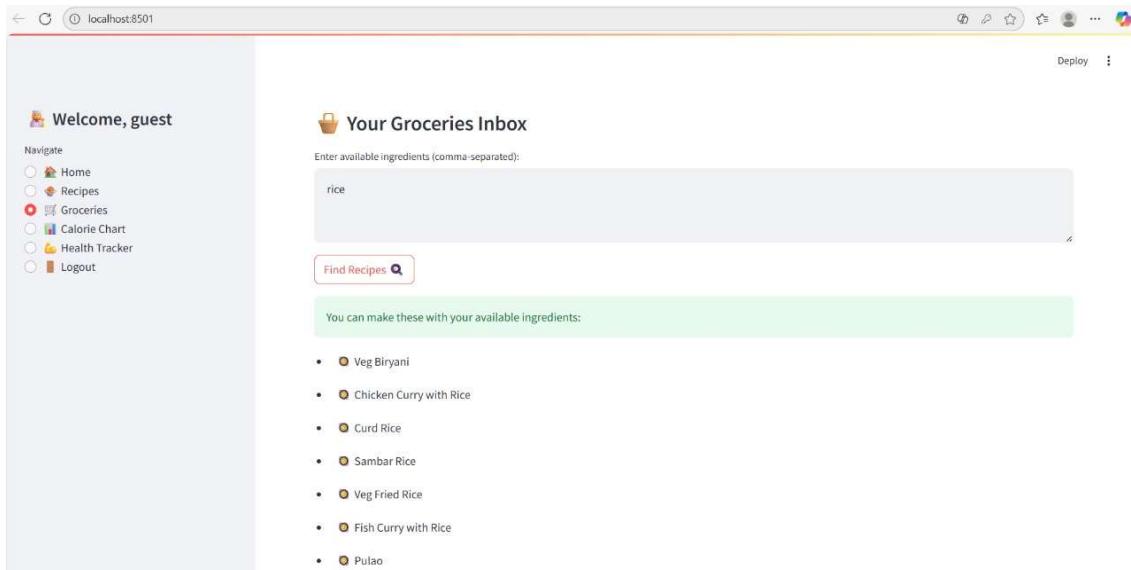
Once clicked:

- Saves the recipe to daily logs
- Records calories for that day
- Confirms success with a green message

This integration transforms browsing into **personalized health tracking**.

### Purpose of the Recipes Tab

- ✓ Encourage users to try healthy meals
- ✓ Provide calorie values upfront
- ✓ Connect recipe choices to calorie tracking
- ✓ Make exploration simple with expandable cards



### Overview of the “Groceries” Tab

This tab functions as a smart **ingredient-based recipe recommender**.

Users input ingredients available at home.

The system scans all recipes and suggests dishes containing any of those ingredients.

### Description of the Groceries Screen

#### 1. Input Field

A large text area allows users to enter ingredients (comma-separated).

Example:

oats, banana, milk

## 2. Smart Matching Algorithm

The app compares the user's input with all recipe ingredients and checks for matches.

If matches exist:

★ “You can make these recipes:”

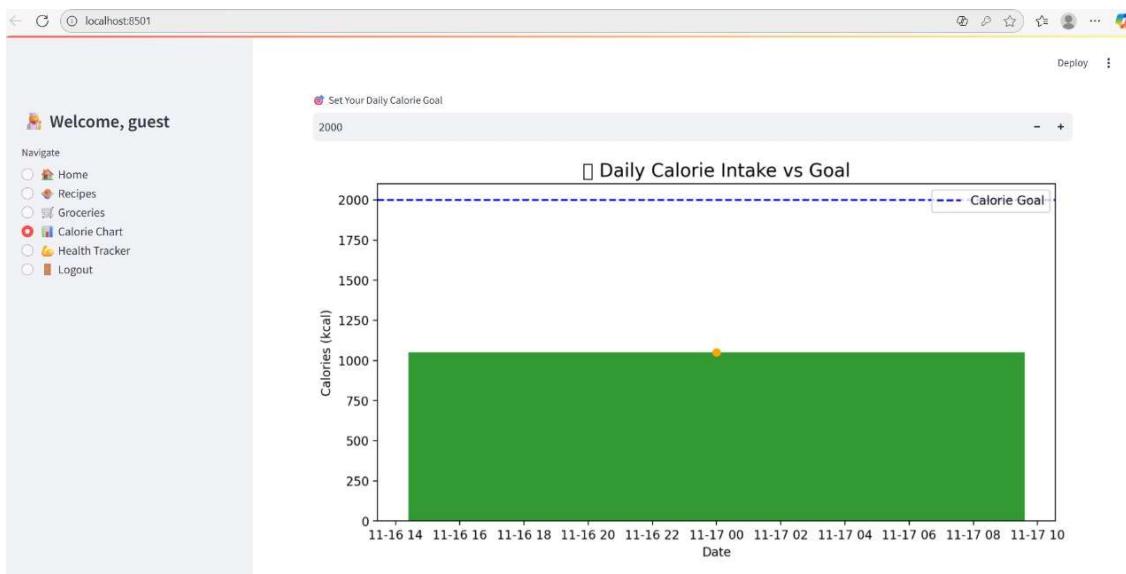
- Dish 1
- Dish 2
- Dish 3

If no match:

⚠ “No recipes match your groceries.”

## Purpose of the Groceries Tab

- ✓ Helps users avoid food wastage
- ✓ Suggests recipes using ingredients already available
- ✓ Encourages cost-effective and healthy meal selection
- ✓ Acts like a quick kitchen assistant



# Overview of the “Calorie Chart” Tab

This tab visually represents the user’s daily calorie consumption using **Matplotlib charts**.

## Detailed Description of the Calorie Chart Screen

### 1. Daily Calorie Goal

Users can update their personal calorie target.

(Default goal = 2000 kcal)

### 2. Calorie Tracking Data

The app compiles all recipes logged through the “Add to Calorie Tracker” button.

Calories are grouped by each date.

### 3. Visual Calorie Chart

Features of the bar chart:

- **Green bars** → Calories under goal
- **Red bars** → Exceeded calorie goal
- **A blue dashed line** → Daily calorie goal
- **Orange line plot** → Daily trend

This makes it easy to compare intake over days and identify patterns.

## Purpose of the Calorie Chart Tab

- ✓ Helps users monitor daily calorie progress
- ✓ Provides visual awareness of eating habits
- ✓ Encourages healthier food choices
- ✓ Turns meal tracking into actionable insights

The screenshot shows a web-based application titled "Calculate Your Health Measures". On the left, there's a sidebar with a "Welcome, guest" message and a navigation menu including "Home", "Recipes", "Groceries", "Calorie Chart", "Health Tracker" (which is selected and highlighted in red), and "Logout". The main content area has fields for "Height (cm)" (160.00), "Weight (kg)" (65.00), "Age" (18), and "Gender" (Female). A "Calculate" button is present. Below these fields, a green bar displays the results: "BMI: 25.39 | BMR: 1464.20 kcal/day". Underneath, a yellow bar provides a dietary tip: "Overweight — try balancing meals."

## Overview of the “Health Tracker” Tab

The Health Tracker helps users calculate:

- **BMI (Body Mass Index)**
- **BMR (Basal Metabolic Rate)**

These calculations support users in understanding their health and diet requirements.

### Description of Health Tracker Screen

#### 1. Input Form

Users enter:

- Height (cm)
- Weight (kg)
- Age
- Gender (Male/Female)

#### 2. BMI Calculation

Displayed with interpretation:

- Underweight

- Healthy
- Overweight
- Obese

This gives users instant clarity about their weight category.

### 3. BMR Calculation

Based on gender:

**Male:**

$$\text{BMR} = 88.36 + (13.4 \times \text{weight}) + (4.8 \times \text{height}) - (5.7 \times \text{age})$$

**Female:**

$$\text{BMR} = 447.6 + (9.2 \times \text{weight}) + (3.1 \times \text{height}) - (4.3 \times \text{age})$$

The results tell users how many calories their body burns daily.

### Purpose of the Health Tracker Tab

- ✓ Offers personalized health metrics
- ✓ Helps users set realistic calorie goals
- ✓ Supports informed diet planning
- ✓ Complements the Calorie Chart for holistic tracking

localhost:8501

Deploy :

⋮

>Welcome to Tasty Bites

Smart Food & Health Tracker

Login to Continue

Username

guest

Password

\*\*\*\*

Login

Forgot Password?

# Overview of the Login System

The app begins with a authentication page containing:

## 1. Login Form

- Username
- Password
- Login button

Simple static login for hackathon demonstration.

## 2. Session Handling

Streamlit session\_state stores:

- Login status
- Username
- Calorie goals
- Logged recipes

This ensures data persists throughout the user session.

## 3. Secure Logout

A dedicated tab clears session data and reruns the app.

## Purpose of the Login System

- ✓ Ensures personalized tracking
- ✓ Maintains user-specific data (daily calories, choices)
- ✓ Provides controlled access
- ✓ Enhances user engagement and personalization

## Summary of User Experience

The **Tasty Bites** application is designed to:

- ✓ Help users eat healthy
- ✓ Track calorie intake effortlessly
- ✓ Discover recipes easily
- ✓ Use groceries efficiently
- ✓ Monitor health metrics
- ✓ Provide a clean, intuitive interface

The combination of **food tracking + recipe discovery + health analytics** makes the app a complete lifestyle assistant for health-conscious users.