



CS426 - Mobile Device Application Development

FINAL PROJECT

Application: AnTap

Group information

1. Bùi Nguyên Hoàng - 21125161
2. Hoàng Nghĩa Việt - 21125027
3. Trần Tuấn Việt - 21125029
4. Nguyễn Đình Tùng - 21125171
5. Đặng Trung Nghĩa - 21125020

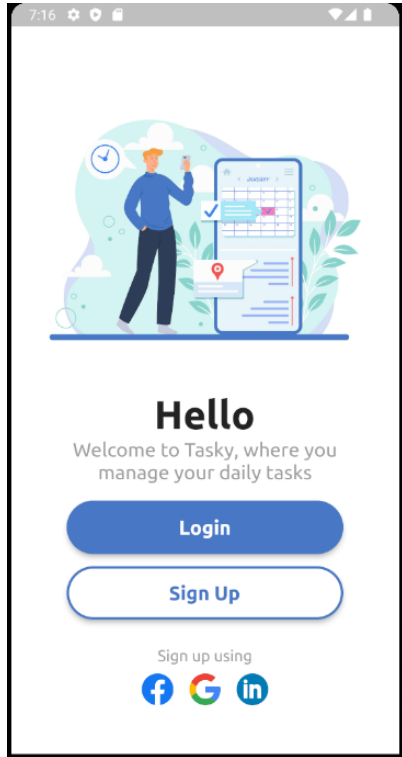
Project information

1. About AnTap

In our final project, we proudly present AnTap, a food review application. The purpose of the application is to facilitate easier access to restaurants across the entire country for everyone. Within this app, each user can browse through restaurant review posts, which include both video and text-based content. Additionally, users can gain a comprehensive overview of all the displayed restaurants, along with their respective locations on a map. Furthermore, individuals have the capability to create and design new restaurants right at their current location. This application can be seen as a miniature social network where people can interact efficiently by posting and sharing video and text reviews of restaurants as they please. We hope that this app will enhance everyone's future culinary experiences.

2. Screens/Functions

Screen	Function
Login screen	
	The initial screen you encounter upon launching the application is the Login Screen .




Users have the option to either login or create an account by selecting the "**Sign Up**" button.

If you select the "register" button, you will be taken to the "**Register Account**" screen.

Upon successful login, you will be directed to the "**Reels Screen**".

Register account

To establish a new account, users are required to provide their email, password, and confirm their password.



7:18

Sign Up

Email

Password

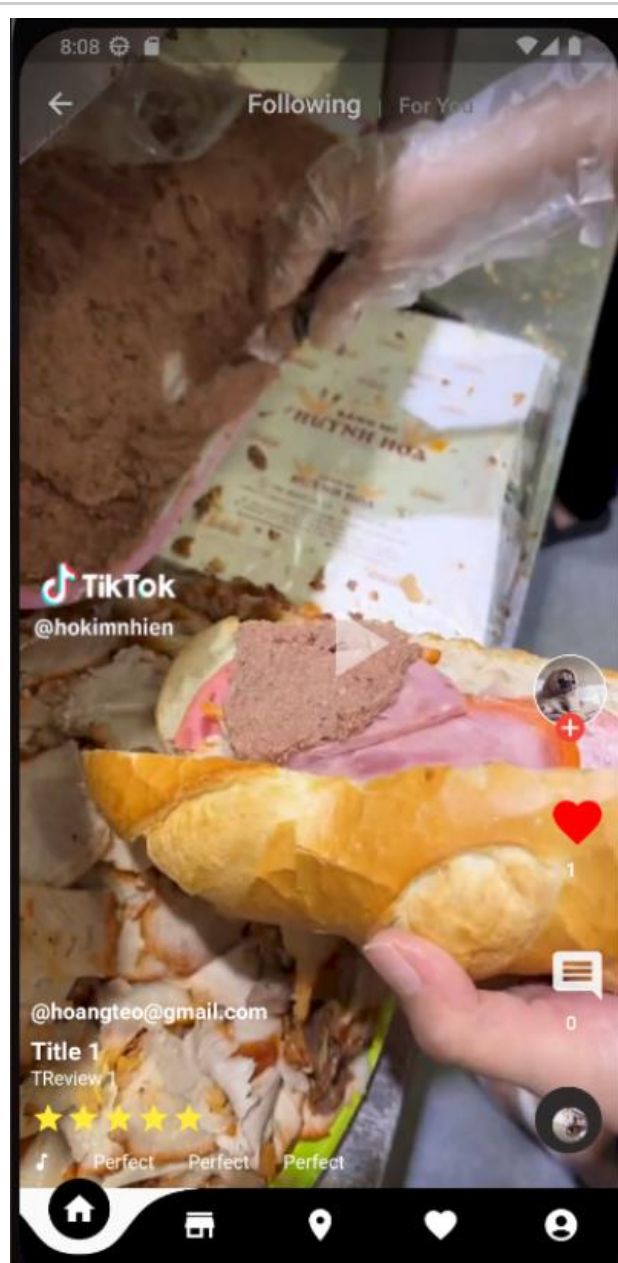
Confirm Password

Have an account? [Sign Up](#)

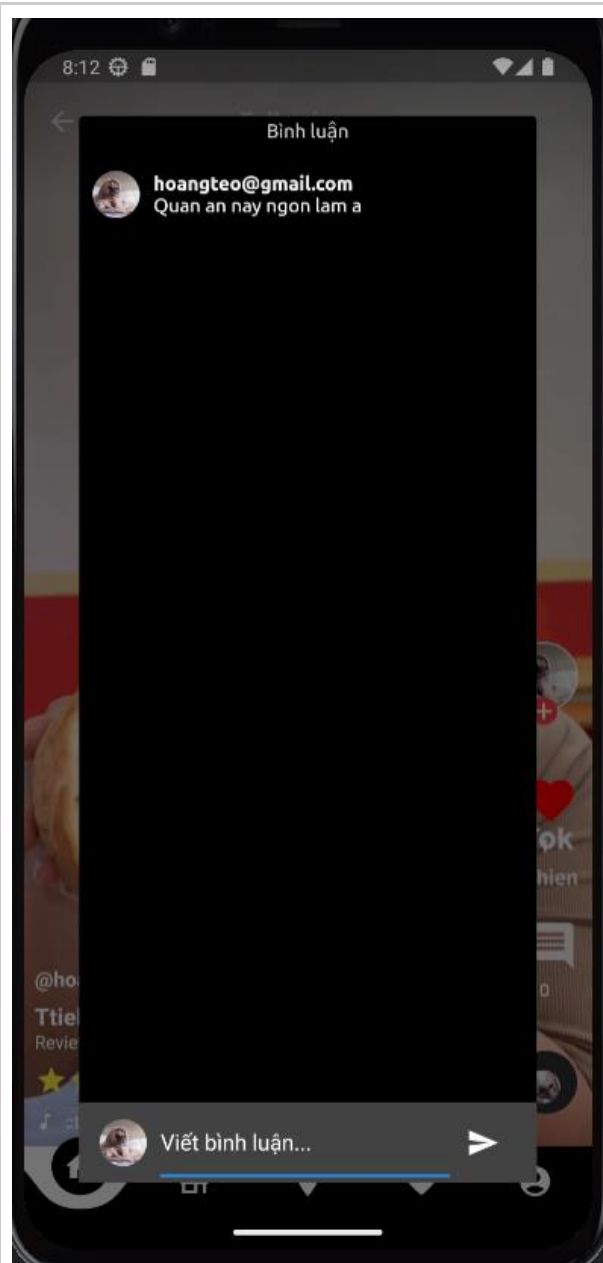
When clicking on Sign Up, new account will be created on Firebase Authentication

When clicking on Have an account?, navigate to “**Login Screen**”

Reels



Users can view the title, review, rating
Users can also view information about the authors.
Users can also view the number of favourites
Videos also have songs playing simultaneously



When clicking on “comment” button, a popup will be displayed for users to read comments and comment on the post

Image review screen

**hoangteo@gmail.com**
2023-09-18 23:39:04.410



Gà Texas

Gà Texas không chỉ là một món ăn, mà còn là một trải nghiệm về hương vị và văn hóa ẩm thực của miền Nam nước Mỹ. Hương vị đặc biệt và hấp dẫn của nó đã chinh phục cả thế giới và làm cho mọi người mê mải. Nếu bạn có cơ hội, đừng bỏ lỡ cơ hội thử món Gà Texas tại một nhà hàng hoặc quán ăn uy tín. Chắc chắn rằng bạn sẽ có một trải nghiệm ẩm thực đáng nhớ.



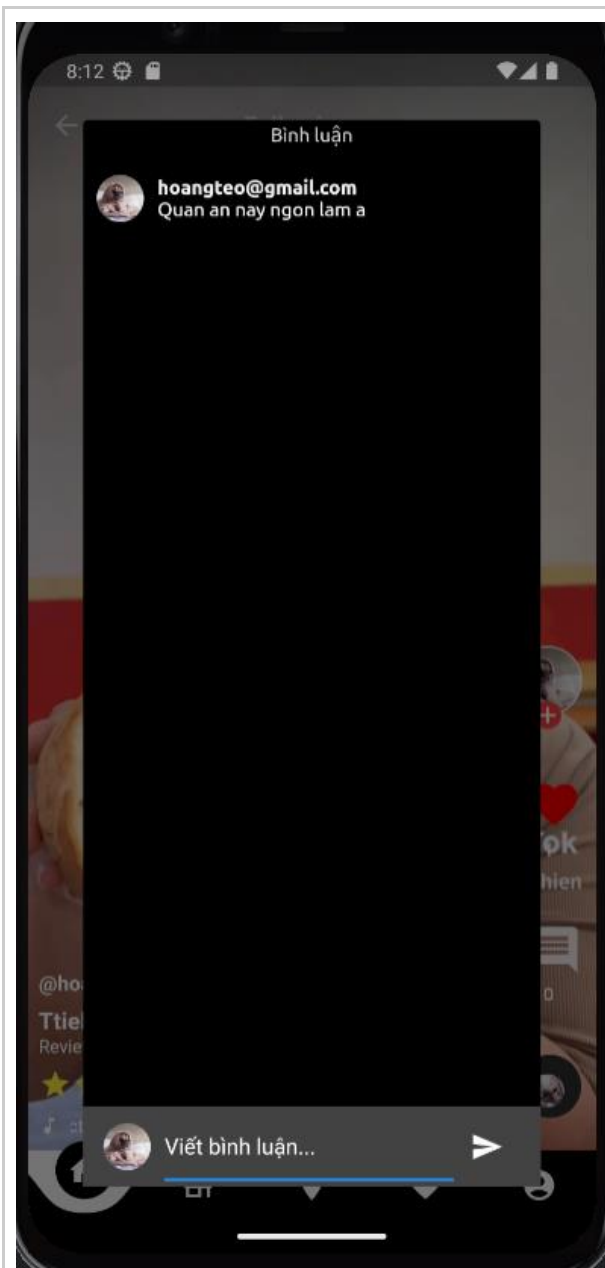

Có 1 lượt thích 

Display list of titles, image reviews and text reviews posted by all users

For each post, user can see:

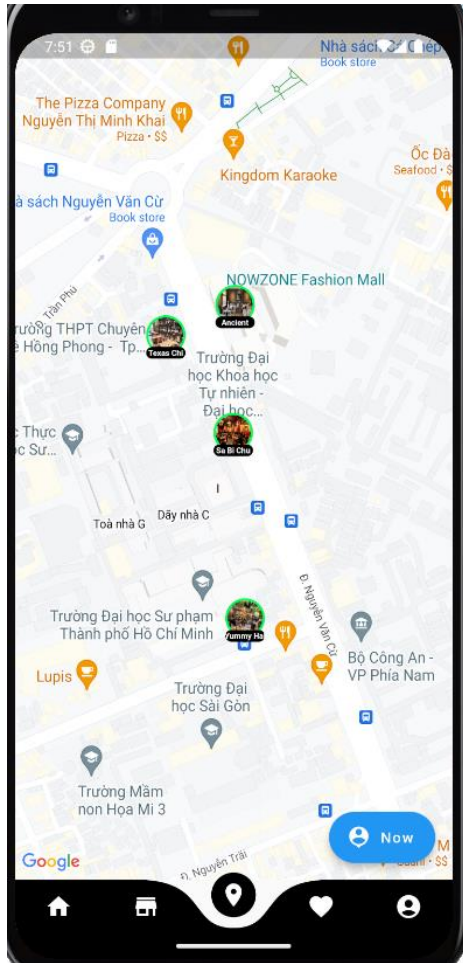
- The number of favorite users
- Comments
- The number of likes
- Author of the post (information on top left of the post)

Users can like posts by clicking on the heart button



When clicking on “comment” button, a popup will be displayed for users to read comments and comment on the post

Map	
	User can see a map with restaurant locations and the current location of the user
	Click the “Now” button to move the screen to the current location on the map

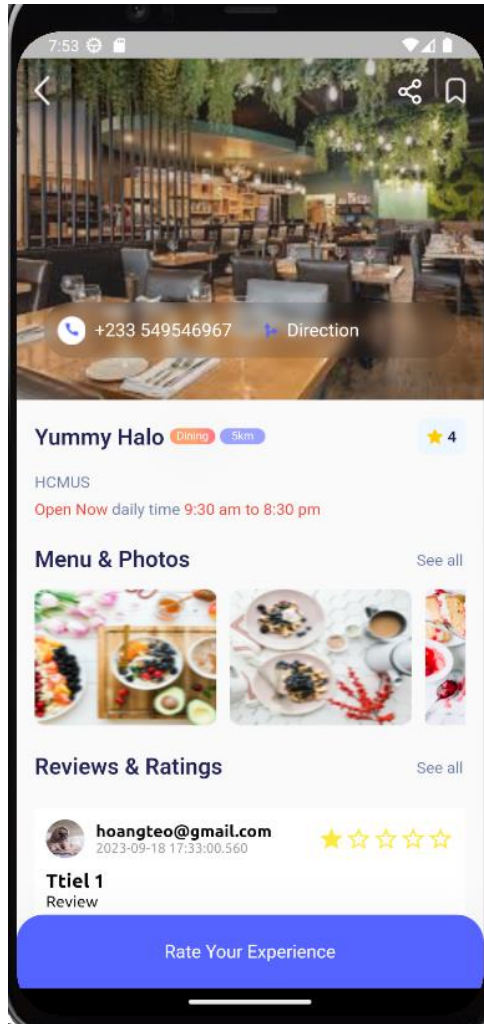


When clicking on a restaurant in the map, “Restaurant information screen” will be displayed for the user to see the information of the restaurant.

Restaurant information screen

In this screen, user can view information about a restaurant such as:

- Name of the restaurant

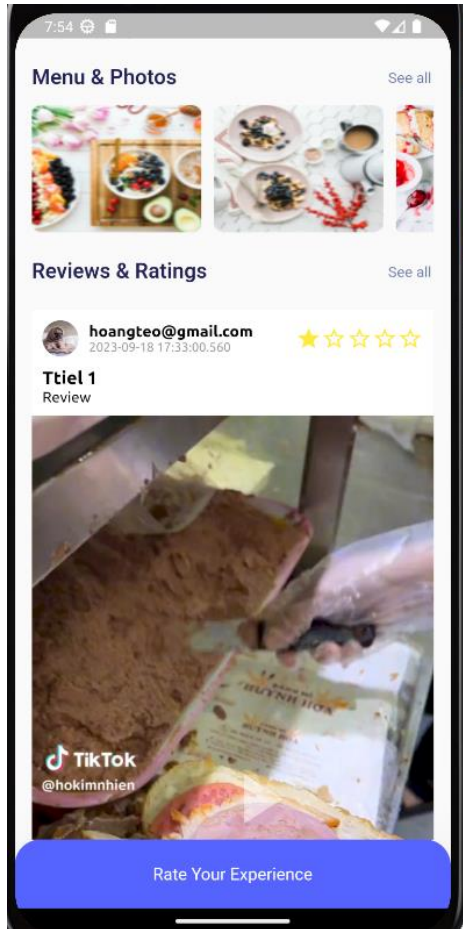


- Introduction
- Phone number, address
- Menu
- Images of the restaurant
- Review posts of restaurants (including video reviews and photo reviews)

For each review post:

- When clicking on “comment” button, a popup will be displayed for user to read comments and comment on the post
- User can see number of likes and like the post by clicking the “like” button

When clicking on “Rate Your Experience” button, “create post” popup will be displayed for user to write a review post about the restaurant

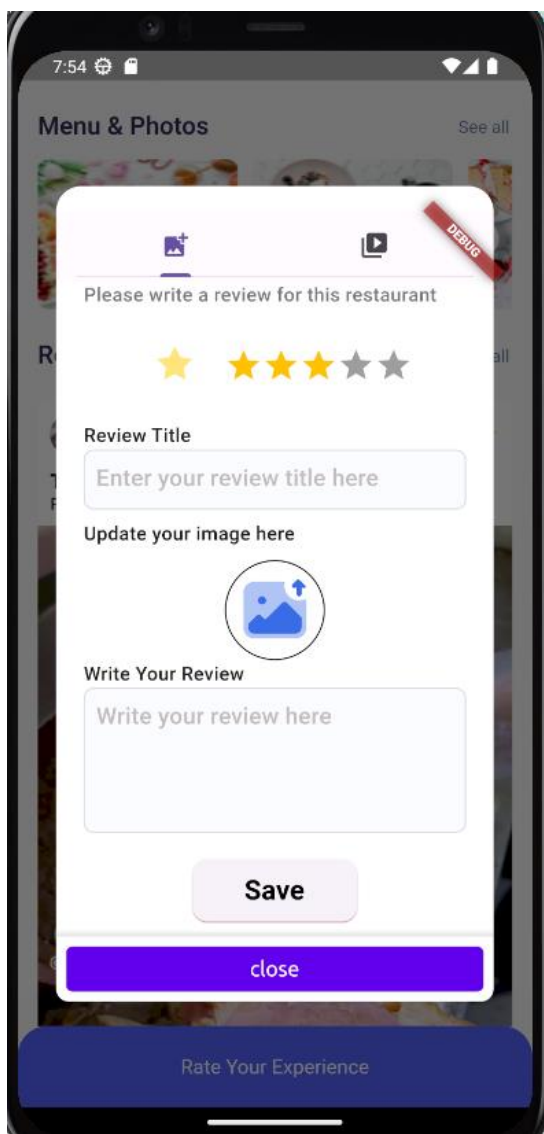


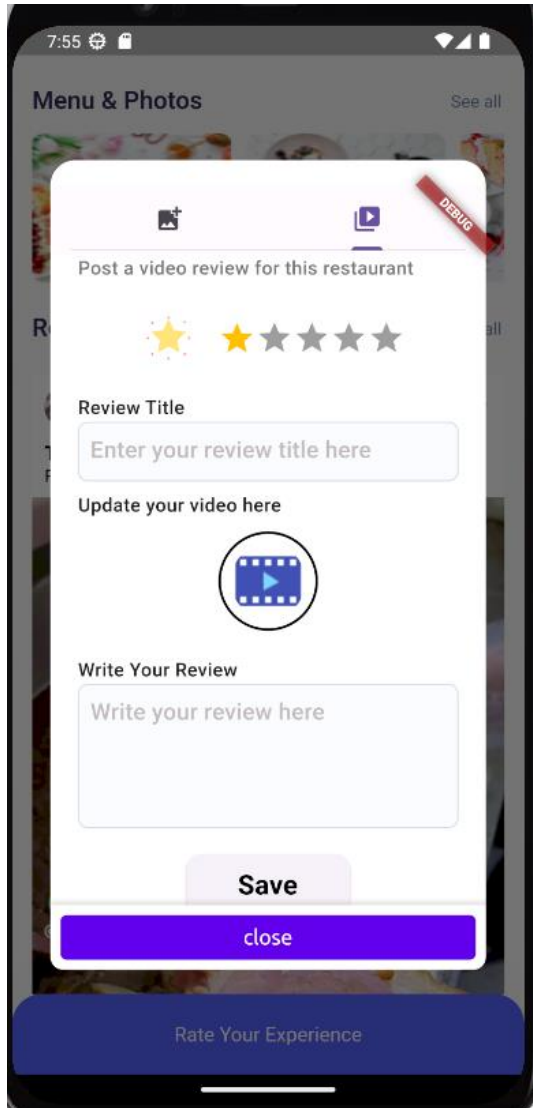
Create post popup

User can create 2 types of review post:

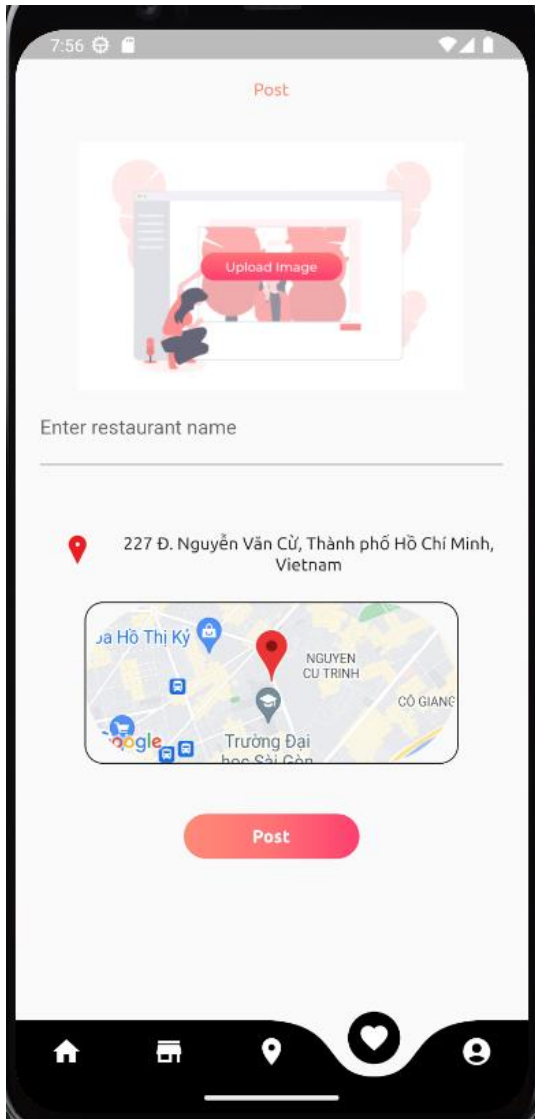
- Image (with title and review content)
- Video (with caption an review content)

	User can also rate the restaurant with stars (1 to 5)





Check in restaurant

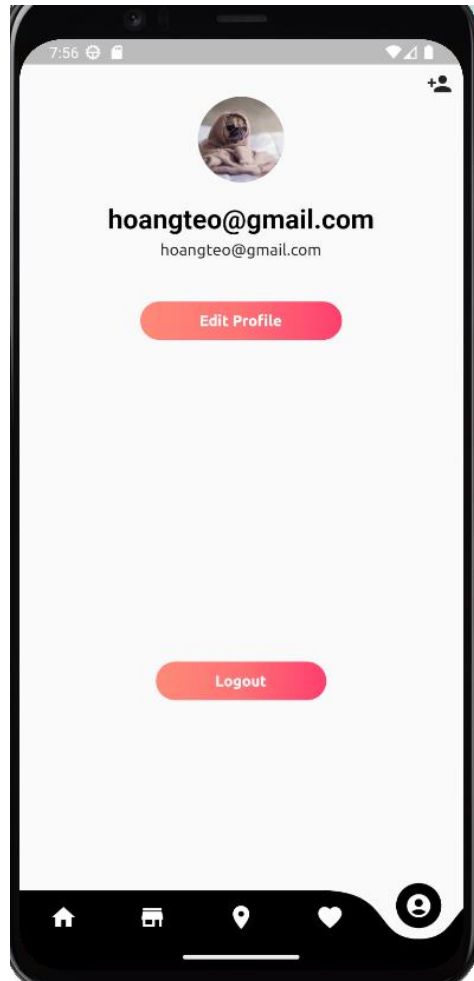


Users can check in a restaurant (pin location of the restaurant on the map) in this screen

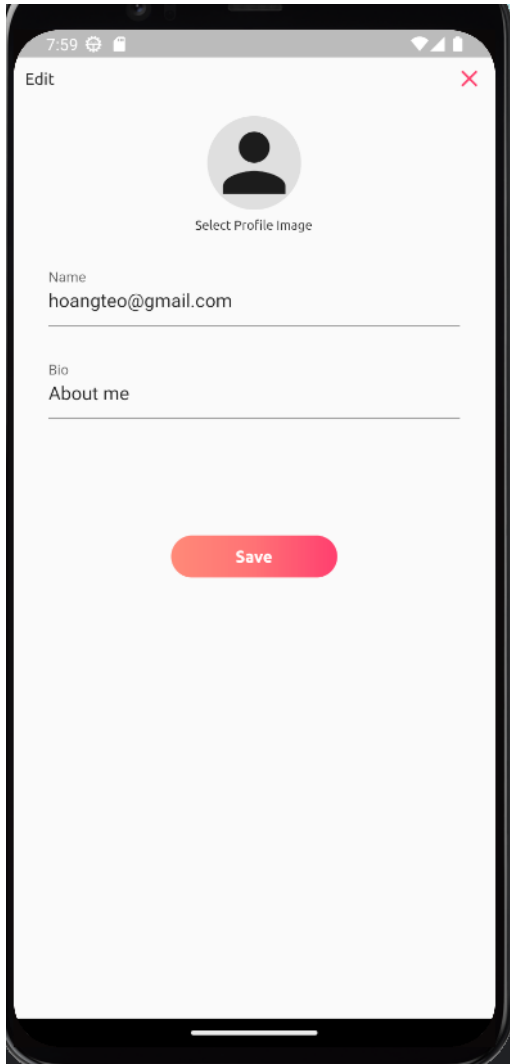
Users need to fill in the avatar and name of the restaurant to post. If no image is uploaded, a default image will be chosen.

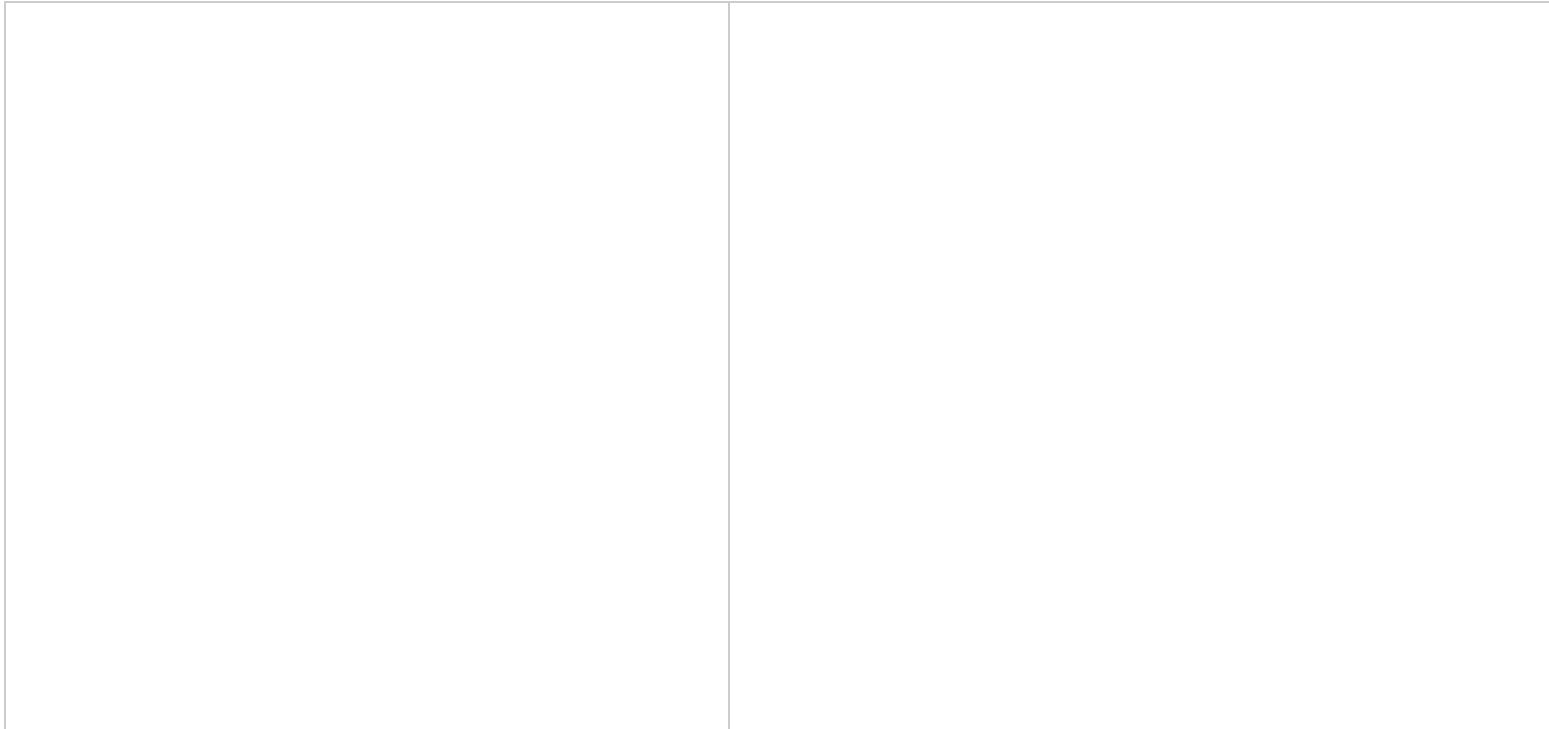
The location is the current location of the device (user can drag around to explore the restaurant near them)

Profile



User can change the username
User can change the profile image





Extra Features

1. Flutter Framework:

- The project leverages the Flutter framework to create a highly responsive and visually appealing user interface across various platforms.

2. Firebase Integration for Enhanced Authentication:

- Firebase authentication is integrated to provide a secure and seamless user experience. It includes:
- User Login: Allows users to access their accounts securely.

- Logout Functionality: Enables users to log out safely.
- Sign-Up Process: Facilitates new user registration.
- Forgot Password Feature: Offers a straightforward password recovery option.

3. Firestore Database Utilization:

- Firestore, a NoSQL cloud database by Firebase, is used to store and manage various types of data, including:
- User Information: Profiles, preferences, and settings.
- Restaurant Locations: Geospatial data for restaurants.
- Image Posts: User-generated images and associated data.
- Video Posts: User-generated videos and relevant metadata.

4. Firestore Storage Integration:

- Firestore storage is employed to efficiently store and retrieve:
- Images: User profile pictures and content images.
- Long Videos: Larger video files associated with posts.

5. Cache Manager Implementation:

- Cache Manager is utilized to optimize the loading of images and videos, reducing network overhead and improving overall app performance.

6. Clean Architecture Package:

- The project adopts the Clean Architecture pattern, providing a structured and modular codebase. This promotes maintainability, scalability, and separation of concerns within the application.

7. Personalized "For You" Page Recommendations:

- The app offers personalized content recommendations on the "For You" page based on:
- User Preferences: Analyzing past interactions and preferences to suggest relevant content.
- Location Proximity: Recommending posts and restaurants near the user's current location.

8. Google Maps API Integration:

- Google Maps API is utilized to seamlessly present a map with restaurant locations. Users can easily explore nearby restaurants and plan their visits using the map feature.

These additional features and techniques collectively enhance the functionality, security, and user experience of the project, ensuring it meets modern standards and user expectations.

9. User interaction

- Enabled users to engage with the platform by allowing them to comment on and like posts.
- Provided a rating system to facilitate users' assessment of content.

References

You should list all source codes and/or references that you use in your project in this section.
Any code fragments or libraries that are not yours **MUST be explicitly declared** in this section.
If you fail/forget to declare those “inherited” resources, you will be considered **“cheating”!**