

Please find the application screen code pushed in the below git repository - <https://github.com/amoghabhardwaj/purs-digital-mock>

1) DESIGN STRUCTURE :

To make the code more organized and maintainable, I have split it into multiple files based on their functionality. Here's a structured approach using a simple design pattern:

MainActivity.kt: Contains the main activity and related UI setup.

ViewModel.kt: Manages the state and data fetching logic.

NetworkService.kt : Uses **Retrofit** to call the API given

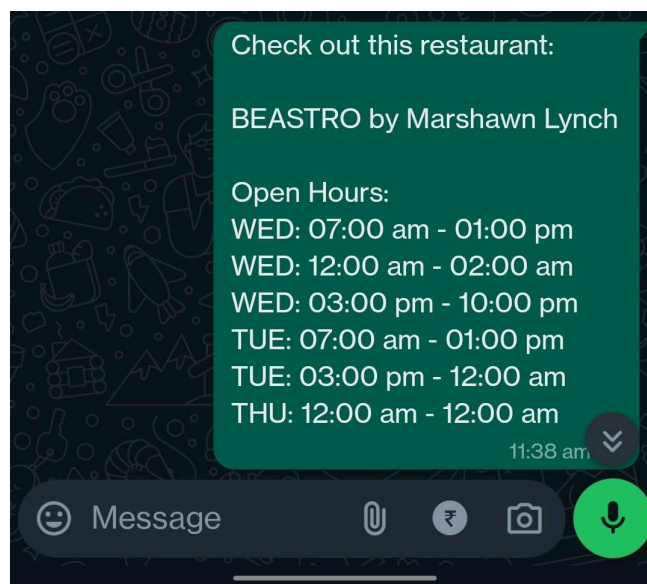
LocationResponse.kt : A data model - to easily display data fetched from the Json response.

RestaurantScreen.kt: Contains Composables/UI Components for the main screen.

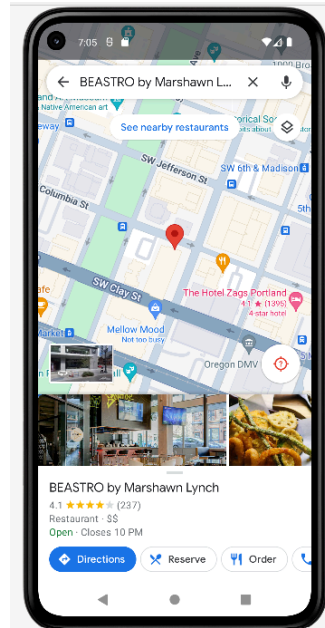
TimeUtils.kt: Contains utility functions for date and time manipulations.

2) ADDITIONAL ITEMS CODED (Out of Syllabus 😊) :

- **WhatsApp icon** - A WhatsApp icon is included in the design, which would let users share the restaurant details (which include the name and open hours) directly to their contacts through WhatsApp. **Edge Case handled** - I have even handled the edge case where if the user doesn't have the WhatsApp app, a Toast would be shown telling the user, "WhatsApp not installed".

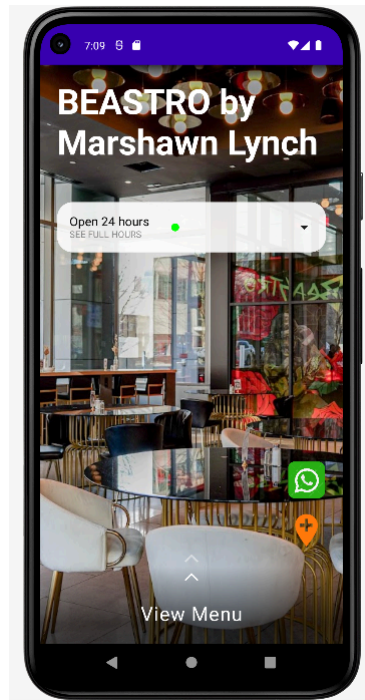


- **Maps icon** - If the user clicks on this icon, he would directly be navigated to Google maps on his phone, with the restaurant and its location. The user can easily navigate to the restaurant.

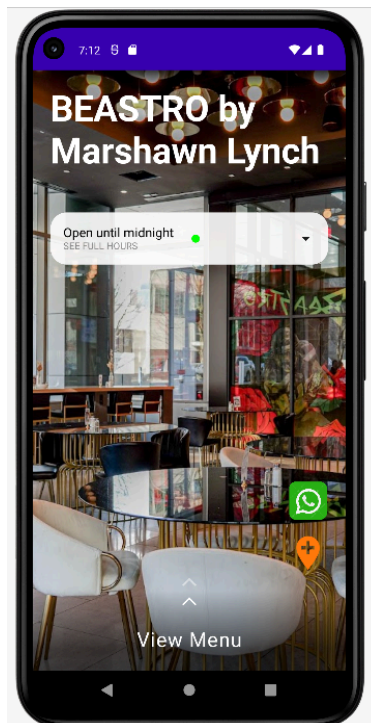


3) **EDGE CASES HANDLED :**

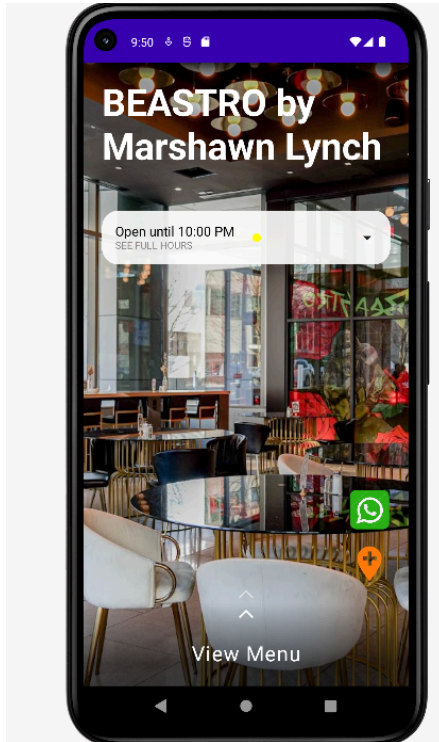
- The height of the expandable section is fixed, so let's say if the response data is more than the height, a **vertical scrollbar** would be added to the element, without disturbing the main screen functionality and design.
- All the **time related edge cases** are handled. Please find the screenshots attached related to them -
 - "Open 24 hours "



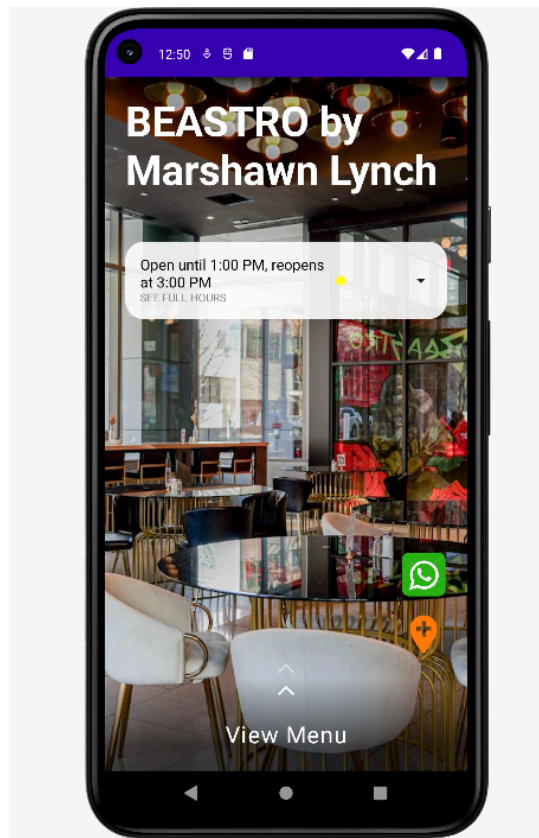
- “Open until midnight”



- ”Open until {time}”

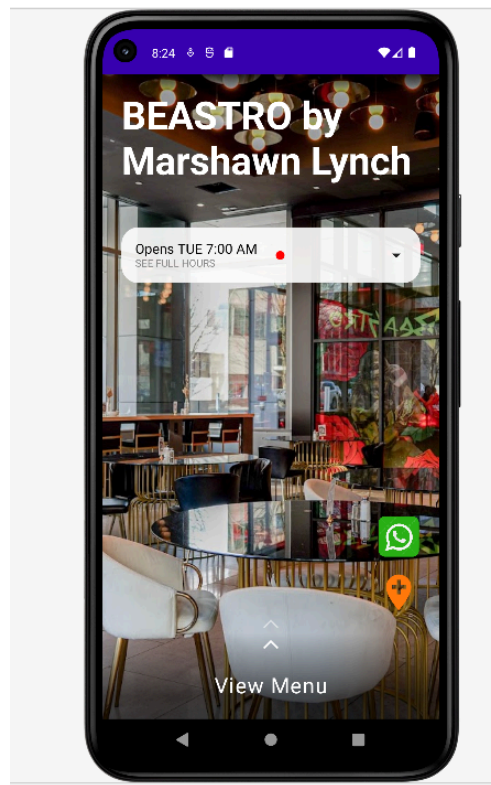


- “Open until {time}, reopens at {next time block}”



- “Opens again at {time}” If the next open period begins within 24h.

- “Opens {day} {time}” if the next open period begins greater than 24 hours in the future - **Assuming the current day is Saturday, and the next it opens is on a Tuesday.**



- If you notice, the days are not sorted in the response. The **days in the expandable surface are shown in a sorted manner.**
- Similarly, the different time intervals for the same day are not sorting according to the start times. The **time blocks, shown in the expandable surface, are sorted according to the start times.**
- The current day, and the current time block, is made **bold** inside the expandable surface.

4) **ALL REQUIREMENTS MET :**

- Name of restaurant
- Expandable surface with proper text and time
- Expandable surface with proper details fetched from the API
- Gradient display at the top and the bottom of the screen
- Background
- Dot next to the text - changes colour properly

- Edge cases met
- View Menu icon

5) Comments are given throughout the code for proper and better understanding.

6) The project structure is divided in such a way that it's readable and maintainable.