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AQI app

Description

App will show the air quality of a particular area , data will be updated everyday. It aims to make people more aware of their environment.

Intended User

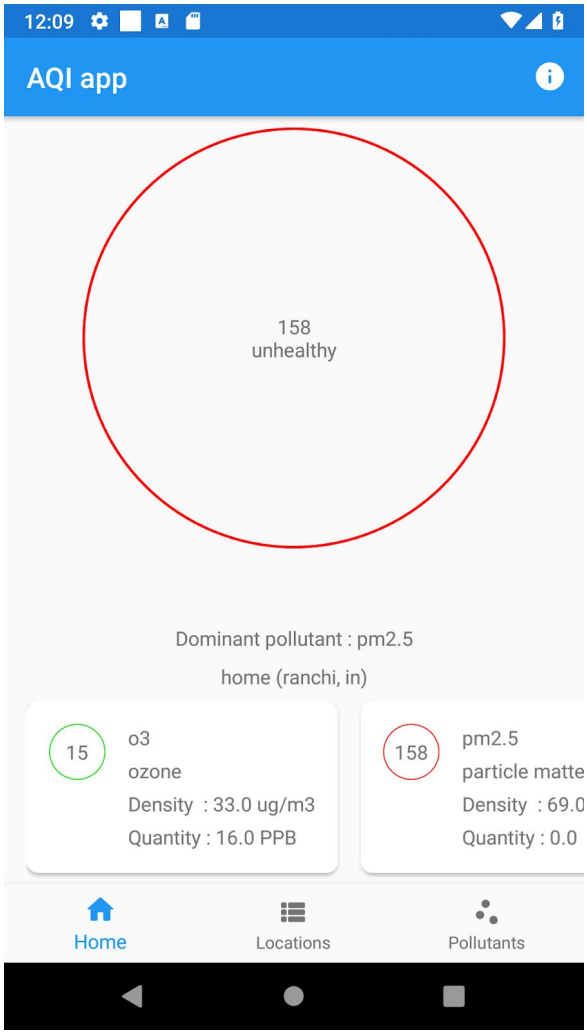
This app is for daily commuters , they can see the air quality before commuting and take necessary precautions if necessary.

Features

- Shows air quality data
- Shows dominant pollutant
- Shows individual pollutant data

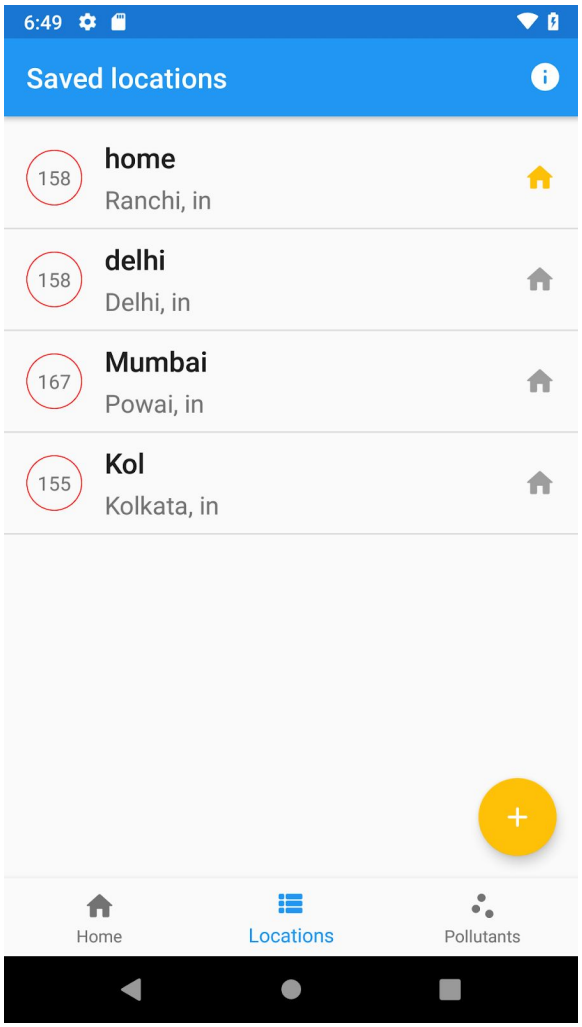
User Interface Mocks

Screen 1



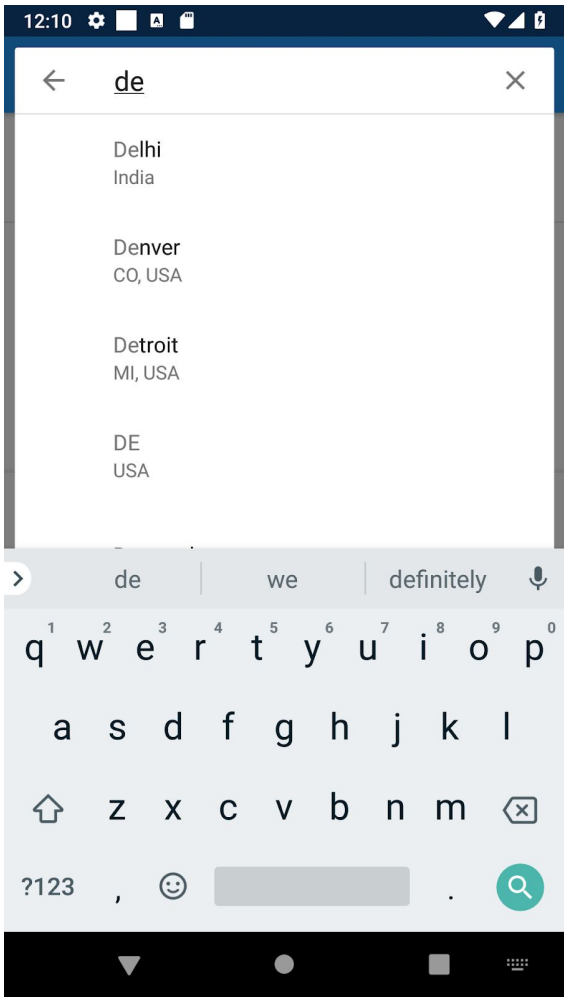
Home fragment , shows the air quality data for users home location.

Screen 2



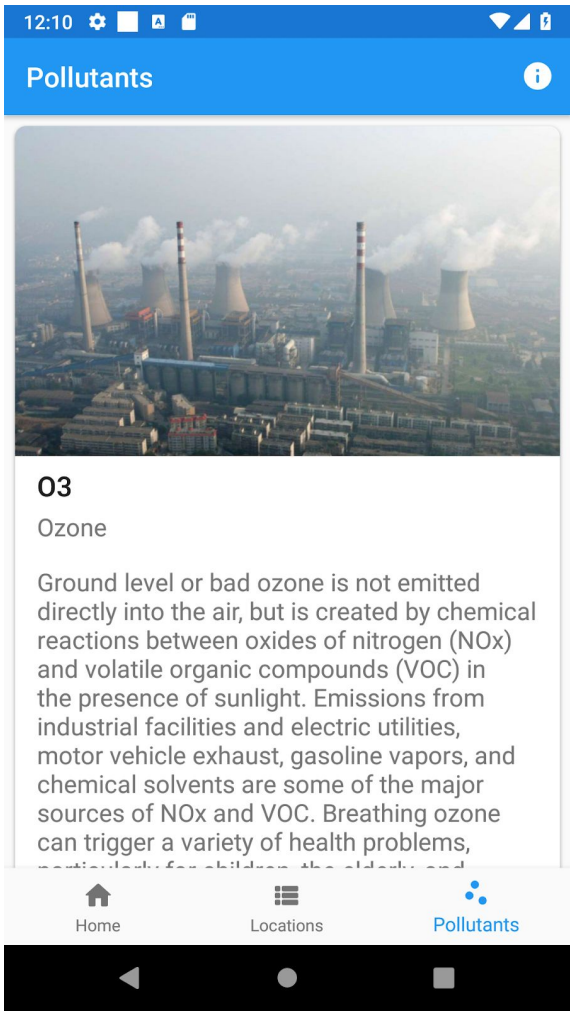
Locations fragment , user can add more locations by pressing add button , also remove places by swiping or mark a place as home. Home location will be shown on the home fragment , and also on the widget.

Screen 3



On pressing the add button google places dialog box will open to help user to pick a place.

Screen 4



Pollutants fragment , it shows info about pollutants and how they affect human health.

Key Considerations

How will your app handle data persistence?

I will use room to save data , and follow a repository pattern.

Describe any edge or corner cases in the UX.

It will be a single activity and three fragment ui , user can switch between the fragments using a bottom app bar.

Describe any libraries you'll be using and share your reasoning for including them.

I will be using retrofit library to handle network operations.

Describe how you will implement Google Play Services or other external services.

I will use location services , to give location based air pollutants and air quality data. I will also use admob to display ads.

Next Steps: Required Tasks

Task 1: Project Setup

Sub tasks :

- Configure retrofit to get data from the internet.
- Display the data in raw format

Task 2: Implement UI for Each Activity and Fragment

List the subtasks. For example:

- Build UI for MainActivity
- Build UI for the three fragments
- First ,homefragment will show the air quality data of one particular location (user will have option to choose this home location)
- Second fragment will have a list of location data , the user can also add new places from this fragment , all the places will be shown in a recycler view , all places will also have a button to mark a particular place as home location , which will then be displayed in the first fragment
- Third fragment will have some basic information on air pollutants , and what this data is about.

Task 3: Your Next Task

Implement repository pattern. To save location data

- Add a functionality to add more places , using google places library , when user will click on the add button on the second fragment , then a google maps search window will open

, user can select a location. After this the location data will be requested , then this data will be saved.
- Add a firebase job scheduler to refresh the air quality data of all the saved locations every day at 2 PM.

Task 4: Your Next Task

Create a widget.
- Create a widget to show home location data.

Task 5: Your Next Task

Describe the next task. List the subtasks. For example:
- Improve the UI design
- Make app material
- Add ad in appropriate place

Task 6: Your Next Task

Create an icon for app.
- Create icon for app.
- Prepare to upload on play store