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# PropertyTrail

## Description

This app would help you know average Rent in any neighbourhood across the United States. It also tells about the average Price to Rent ratio in the neighbourhood.

If you are interested in details, just tap on a zipcode and you can find more details like Turnover in Housing Market for Past 1 Year, Number of houses sold for gain/loss etc.

It's good to know these stats before you plan to invest or move to any area.

All you have to do is enter the zip code for the desired neighbourhood.

## Intended User

Anyone planning on real estate investment, moving to a new area, or just interested in real estate.

## **Features**

List the main features of your app. For example:

- Saves zip code information
- Displays details like Price to Rent Ratio and Rent on the main page
- Includes a detail page to display information like Turnover in housing market for the neighbourhood
- Includes a widget

## **User Interface Mocks**

### Screen 1



Main page would by default display rent details for user's current location. The floating action button would help user add any other zip code. Once the user enters a zip code, details for the neighbourhood would be updated on the main screen. User can click on any zip to navigate to the details page.

### Screen 2



This page would provide more details about a particular neighbourhood, like median listing price, how many houses were sold for a gain/loss etc. User can always navigate to the main page.

### Widget Screen



Widget would display zip codes and average price per square foot for the corresponding zip code. On click it would take us to main page of our app.

## **Key Considerations**

How will your app handle data persistence?

Once user enters a zip code, app will collect a few attributes from Quandl api and store them into the app's database using content provider. There would be a single table in the database, and the zip code would be unique.

Describe any corner cases in the UX.

A click on any zip code would open the details page for that particular neighbourhood. There would be a back button which would navigate the user back to main screen.

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

Butterknife, as there are lot of textviews that need to be populated on runtime. It would improve code redundancy and make it cleaner.

Quandl API to fetch real estate data.

#### Describe how you will implement Google Play Services.

- Add location services which would display the user's location as default neighbourhood
- Add google admobs

## Next Steps: Required Tasks

This is the section where you can take the main features of your app (declared above) and decompose them into tangible technical tasks that you can complete incrementally until you have a finished app.

## Task 1: Project Setup

- Create a master detail flow activity.
- Generate your own API key

## Task 2: Implement UI for Each Activity and Fragment

- Build UI for MainActivity which would contain a recycler view, a dialog header for user input
- Build UI for details page

### Task 3: Implement database

- Build content provider, setup tables
- Verify the zip code entered by the user is stored in database

#### Task 4: Fetch data from API

- Build url to connect to the api to retrieve data using async task
- Add snackbar to show, if no internet connection

#### Task 5: Store and load data

• Use content provider to store data fetched from the API

- Use loader to load data into the views.
- Use butterknife for view binding

## Task 6: Add widget

• Add widget to show the price to rent ratio for the selected neighborhoods

## Task 7: Add google play services

- Add location services which would display the user's location as default neighbourhood
- Add google admobs