Penn Interactive Android Interview Project

Assessment

This assessment is used to gauge your Android skills.

The task is to complete the user stories listed below, using the Assessment Designs document for design guidelines. You should use the linked android project below `pengineering/android-interview` to complete the assessment.

The first user story has been completed to demonstrate a simplified version of the architecture and tech stack we use at PIV. While you are free to use any architecture and libraries you wish, it is preferred for you to follow a similar approach as what is already in the project.

The following requirement should take you roughly 3-4 hours to complete. Feel free to add any additional features in which you think would better demonstrate your skill set.

If you need any clarification please reach out to the recruiter or directly to Penn's HR department.

User Stories

1. A user can input a zip code or a city name to retrieve the current weather for the location.
    a. User can tap go to initiate the query
        i. If a user doesn't enter any characters they should be prompted with a notification saying "Please enter query"
        ii. If a user enters less than 3 characters they should be prompted with a notification saying "Please enter more than 3 characters"
        iii. If the query succeeds display the information as described in the designs.
2. If the query fails display an error message in place of the weather information with a message of "Error occurred retrieving weather information". Please refer to designs.
3. When viewing current weather, a user can refresh the data
    a. Tapping the refresh button should refresh the weather information.
4. A user can see the forecast for the location they are currently viewing the weather for
    a. Tapping the "See Forecast" button will bring the user to a screen which shows the forecast for the next 3 days. Please refer to the designs.
5. A user should be able to see an autocomplete list of locations as they are typing into the input field on the current weather homepage
    a. Once there are 3 or more characters a list of at most 5 items should appear below the input box.
        i. Tapping on an autocomplete selection should initiate the weather query, dismiss the autocomplete view and clear out the input field.
6. A user can change between Imperial and Metric units for Temperature and Wind speed.
    a. Users can tap settings to open the settings screen
        i. Users can change between Imperial and metric
            1. This setting should be retained across app launches.
            2. When imperial is selected temperature should be displayed in Fahrenheit and wind speed in MPH
            3. When metric is selected temperature should be displayed in celsius and wind speed in KPH

Designs

See the attached designs for reference. Use the prototypes as guides, feel free to experiment with whatever UI you think is best.
Please keep in mind that the UI is less important then getting functionality complete.

Project

https://github.com/penngineering/android-interview

Submission

The complete assessment should be submitted back to Penn Interactive through a public GitHub repository in the form of a link.

Screen 1 — Empty state

Input Zip / City   Go

Please enter a zip code or a city

Settings

Screen 2 — Current Weather

Input Zip / City   Go

Current Weather

Local Time: 08-15-21 7:00pm

Temperature: 95F

Condition: Partly Cloudy

Wind Direction: N
Wind Speed: 6MPH

Refresh   See Forecast

Settings

Screen 3 — Autocomplete

Input Zip / City   Go

Autcomplete

Syracuse, New York, United States of America

Skytop, New York, United States of America

Eastwood, New York, United States of America

Current Weather

Local Time: 08-15-21 7:00pm

Temperature: 95F

Condition: Partly Cloudy

Wind Direction: N
Wind Speed: 6MPH

Refresh   See Forecast

Settings

Screen 4 — Error state

Input Zip / City   Go

Error occurred retrieving weather information

Settings

Screen 5 — Settings

Settings

Units   ○ Imperial   ○ Metric

Screen 6 — Forecast

Forecast

Date: 2021-08-05
 Min Temperature: 78.2F
Max Temperature: 95.1F
Wind Speed: 6.5 MPH
Condition: Sunny

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