CS Assignment Instructions

The assignment

You should build an application using the TheMovieDB API. We have provided an initial application that will help you with fast-tracking app development. It contains the following:

- Class containing baseUrl and API key which is needed to fetch contents from TMDB API.
- Basic implementation of a scrollable list to fetch contents and display them in list format.
- Basic JSON parsing to parse server response and populate details.
- Placeholder RatingView class

The UI

Layouts to follow: here are links to the layouts you need to follow, you can inspect each view to get the dimensions.

- Android
- iOS

Technical Information

We expect you to implement the following functionalities in the app:

1. List horizontally currently playing movies.
    1. API: https://api.themoviedb.org/3/movie/now_playing?language=en-US&page=undefined&api_key=55957fcf3ba81b137f8fc01ac5a31fb5
    2. Only display poster images in the horizontal scrolling list view, No pagination necessary.
2. Display the most popular movies in the vertical list view, as this list will contain multiple pages, Pagination support will be required.
    1. API: https://api.themoviedb.org/3/movie/popular?api_key=55957fcf3ba81b137f8fc01ac5a31fb5&language=en-US&page=1
    2. Each list item will contain the following:
        1. Poster image
        2. Title
        3. Rating
        4. Duration
        5. Release date
3. When a user clicks on any movie list item, it will navigate to a detailed screen, with more information about the movie.

1. API: https://api.themoviedb.org/3/movie/ {MOVIE_ID}?api_key={YOUR_KEY}
2. Detail screen should contain the following information:
    1. Poster image: use the API as per described https://developers.themoviedb.org/3/getting-started/images
    2. Duration
    3. Title
    4. Overview
    5. Release date
    6. List of genres

Requirements

1. Write network implementation to fetch and parse the movie JSON response and render on the UI:
    1. Implement the paging mechanism to load a list of movies as the user scrolls down the list.
    2. Cache movie images, in order to make smooth scrolling.
2. Implement custom rating view to show ratings of the movie:
    1. The animation is not necessary.
    2. Use Yellow tint for movie ratings less than 50% and Green for 50% and above.
3. Provide UI/Unit tests.
4. Implementation of the Details screen.
5. 3rd party libraries are allowed (except for the rating view).

Additional requirements / restrictions

1. Disclaimer: this is not an ordinary assignment. If you notice any strange behavior, you are free to make decisions regarding the implementation or to take things out of scope, as long as your decision can be justified.
2. Provide a README.md explaining your approach, which includes the image caching but also the rating view implementation and any other important decision or assumptions you made during development. Also, list all the 3rd party libraries used and the reason why.
3. The code of the assignment has to be delivered along with the git repository (.git folder). We want to see your progress. We require a cloud-hosted repository on Bitbucket, which ***must*** be private.
4. You are free to handle extra requirements, and this will be part of how we evaluate your work.
5. The application should be developed in portrait mode only.
6. Minimum Supported versions:
    1. Android - 5.0 +
    2. iOS - 13.0 +