



## PROJECT SPECIFICATION

### Popular Movies, Stage 2

#### Common Project Requirements

##### MEETS SPECIFICATIONS

App is written solely in the Java Programming Language.

App conforms to common standards found in the [Android Nanodegree General Project Guidelines](#).

App utilizes stable release versions of all libraries, Gradle, and Android Studio.

#### User Interface - Layout

##### MEETS SPECIFICATIONS

UI contains an element (e.g., a spinner or settings menu) to toggle the sort order of the movies by: most popular, highest rated.

**MEETS SPECIFICATIONS**

Movies are displayed in the main layout via a grid of their corresponding movie poster thumbnails.

UI contains a screen for displaying the details for a selected movie.

Movie Details layout contains title, release date, movie poster, vote average, and plot synopsis.

Movie Details layout contains a section for displaying trailer videos and user reviews.

**User Interface - Function****MEETS SPECIFICATIONS**

When a user changes the sort criteria (most popular, highest rated, and favorites) the main view gets updated correctly.

When a movie poster thumbnail is selected, the movie details screen is launched.

When a trailer is selected, app uses an Intent to launch the trailer.

### MEETS SPECIFICATIONS

In the movies detail screen, a user can tap a button (for example, a star) to mark it as a Favorite. Tap the button on a favorite movie will unfavorite it.

## Network API Implementation

### MEETS SPECIFICATIONS

In a background thread, app queries the `/movie/popular` or `/movie/top_rated` API for the sort criteria specified in the settings menu.

App requests for related videos for a selected movie via the `/movie/{id}/videos` endpoint in a background thread and displays those details when the user selects a movie.

App requests for user reviews for a selected movie via the `/movie/{id}/reviews` endpoint in a background thread and displays those details when the user selects a movie.

## Data Persistence

### MEETS SPECIFICATIONS

**MEETS SPECIFICATIONS**

The titles and IDs of the user's favorite movies are stored in a native SQLite database and exposed via a ContentProvider

**OR**

stored using Room.

Data is updated whenever the user favorites or unfavorites a movie. No other persistence libraries are used.

When the "favorites" setting option is selected, the main view displays the entire favorites collection based on movie ids stored in the database.

**Android Architecture Components****MEETS SPECIFICATIONS**

If Room is used, database is not re-queried unnecessarily. LiveData is used to observe changes in the database and update the UI accordingly.

If Room is used, database is not re-queried unnecessarily after rotation. Cached LiveData from ViewModel is used instead.

**Suggestions to Make Your Project Stand Out!**

- Extend the favorites database to store the movie poster, synopsis, user rating, and release date, and display them even when offline.

- Implement sharing functionality to allow the user to share the first trailer's `YouTube` URL from the movie details screen.

---

[Student FAQ](#)