# **Project - Movie List App**

You are tasked with building a movie information app that displays a list of movies from The Movie Database (TMDb) API. The app shows top movies for each year and users can filter by genre, the app also loads top movies from previous / next years as the user scrolls through the list.

Use this <u>Figma prototype</u> as a reference and feel free to design and develop based on your preferences.

## Requirements

- Layout and UI
  - Create custom UI components for the app, using React, Vue, or any suitable JavaScript library for reusability.
  - o Display a list of movies sorted in descending order of popularity.
  - Show the movie title, image, genre, cast, director, and a short description related to the movie in each information card.

## Default page load state

- Load a total of only 20 movies for each year (Image shows only 8 movies per year, that's for reference only, please load 20 movies per year)
- By default, when a user lands on the page, display a list of movies of the year 2012
- Implement smooth scrolling behavior to load more movies as the user scrolls in any direction i.e load movies of previous year when user scrolls up and load movies of next year when user scrolls down until the current year.
- As and when the user scrolls and movies are added to the list, make sure that this interaction is smooth and doesn't cause any jitters.

#### API

- Use the following URL to query a list of movie
   https://api.themoviedb.org/3/discover/movie?api\_key=2dca580c2a14b55200e784
   d157207b4d&sort by=popularity.desc&primary release year=2023&page=1&vot e\_count.gte=100
  - The **api\_key** param in the above URL is part of the GET request, please do not change it.
- To fetch a movie of a specific year, use *primary\_release\_year* filter in the above query. Start from 2012, and fetch the previous or next year with respect to the direction in which the user scrolls the list.
- Vote\_count\_gte = 100 means fetch movies which have received at least 100 votes for popularity. The API returns the movie list sorted by popularity score.
  Feel free to change this value based on the movies you want to show. Please keep the minimum value at 100 to see relevant movies.
- You can find the API documentation <u>here</u> to change the properties accordingly as needed.

#### Genre Filter

- o Provide a filter UI that allows users to filter movies by genre.
- Fetch genres from this API and show genres as filters
- When a user selects one or more genres, the list should only display movies of the selected genres.

## Code Quality

- Write well-structured and maintainable code.
- You can use React, Vue, or any library to create your own reusable components
- Avoid using any pre-built component libraries (e.g., Bootstrap, Tailwind, etc.) for creating UI components.

## Bonus (Optional)

- Implement this project in React Native instead of a web app (You have to submit only one project which is either a web app or a React Native app, bonus point is for creating a React Native app)
- Ensuring smooth scrolling even when more and more movies are loaded in the DOM.
- Implement a search bar which searches for the movie based on the search string and displays an infinite loading list of movies which matches the search.
- Use TypeScript for enhanced type safety and code quality.

### Points to remember

- Feel free to assume UI / UX flows from the figma prototype, just make sure that the UI is usable.
- Provide the public GitHub repository link containing the source code of the project.
- Include a README file explaining how to run the project and any additional details you'd like to provide.
- Provide a short list of requirements you have covered and not covered in the project README itself.
- No code will be evaluated if the project doesn't run after following the steps in README or doesn't have a README at all.
- Feel free to reach out to your recruiter in case of any doubts.