

Task - 1

Overview of landing page



SearchBar Component

It accepts one argument **setSearchVal**. In this, we have to pass a function which is responsible for capturing user inputs.



On changing the value of this search bar, a request is made to the server to fetch the desired movie.

Debounce Effect in SearchBar Component

To optimize the number of requests sent to the server and to avoid another action performed by the user such as enter or clicking the search icon, I have used the Debounce Effect in it.

The debounce change handler is used to optimize performance and reduce unnecessary function calls in scenarios where frequent input changes trigger expensive or resource-intensive operations, such as making API requests or performing computationally expensive computations.

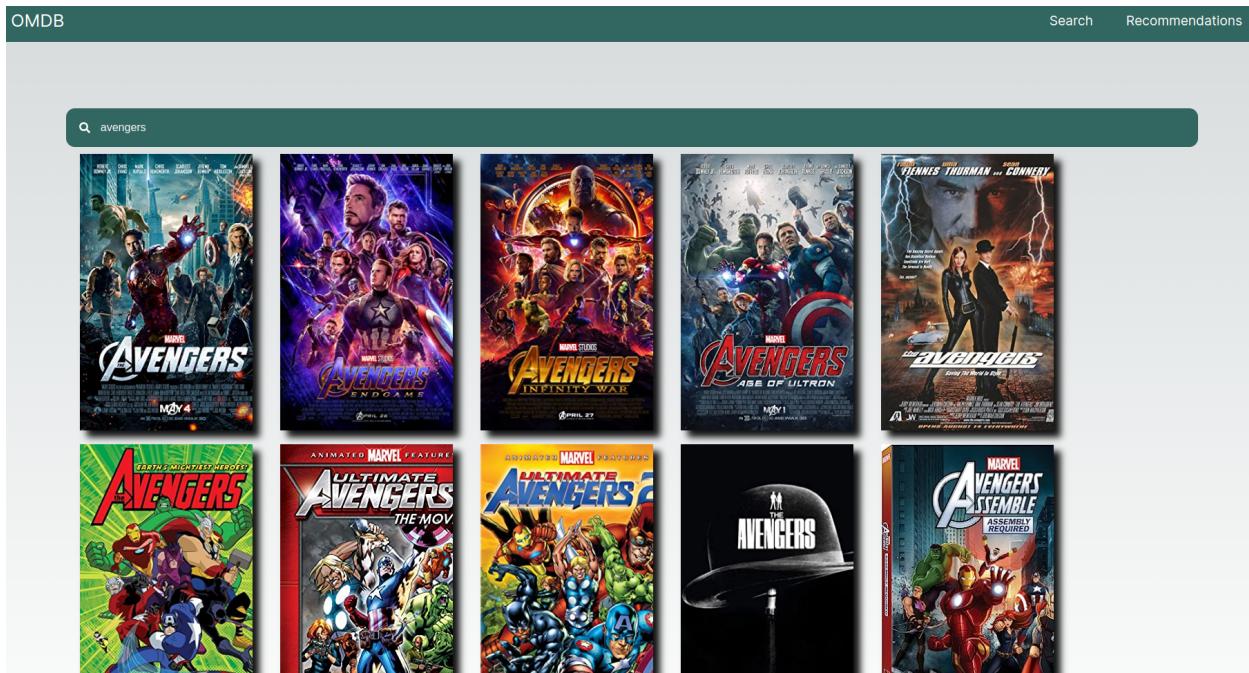
```
const debouncedChangeHandler = useCallback(debounce(handleInput, 800),  
[]);
```

The debounce function wraps the handleInput function and delays its execution for 800 milliseconds after the last invocation. The useCallback hook is used to memoize the debounced function and ensure it doesn't change on re-renders.

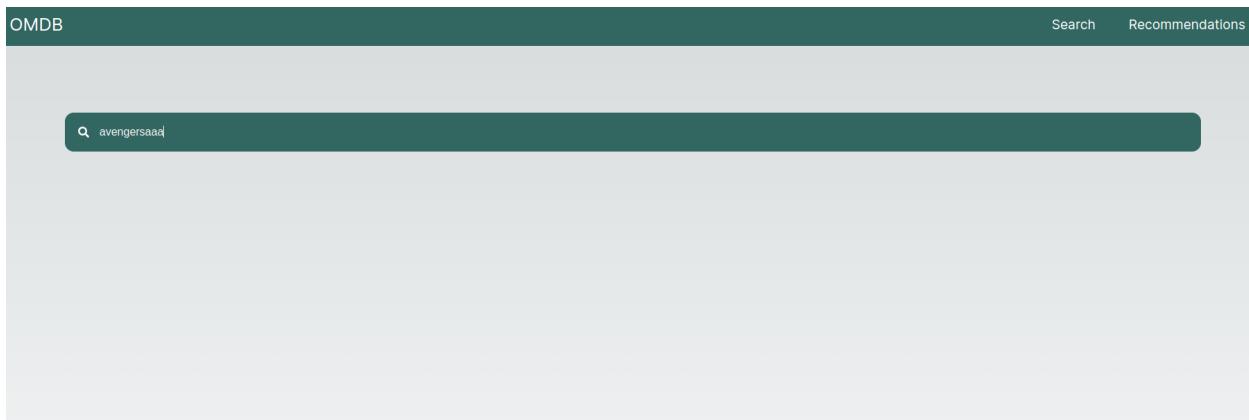
Searched Results

On Every search, if there are results in response, we get 10 maximum records at a time. Each card consists of

- Name of the movie
- Poster
- Year of release



In case of no result found



Pagination

For Pagination I have implemented Infinite scroll because of the following reasons:

- **Improved User Experience**

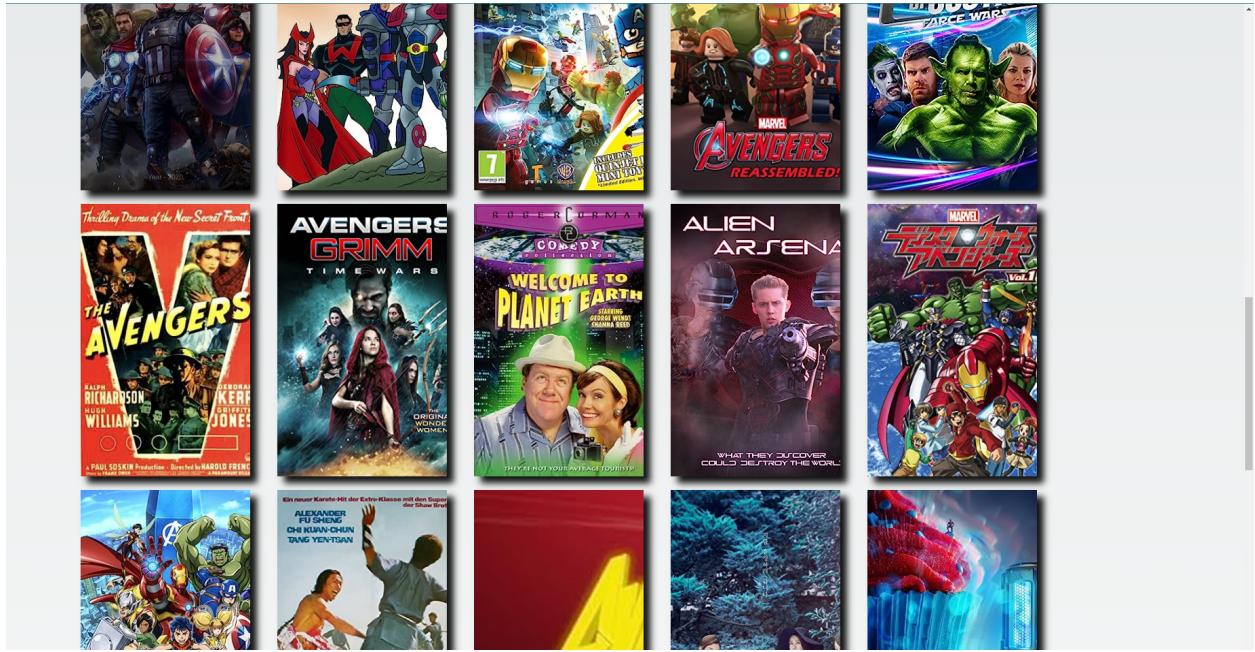
Infinite scroll provides a seamless and uninterrupted browsing experience. As users scroll through the content, new items are automatically loaded, eliminating the need for manual pagination or clicking on "next" buttons. This allows users to consume content continuously without interruptions, making the app feel more fluid and responsive.

- **Faster Content Discovery:**

Infinite scroll enables users to quickly browse a large amount of content, increasing the chances of discovering new and interesting items. As users scroll down, new content is loaded dynamically, providing a continuous flow of fresh information. This helps users find relevant content more efficiently and can enhance their overall satisfaction with the app.

- **Mobile-Friendly Experience:**

Infinite scroll is particularly effective in mobile apps, where limited screen space makes traditional pagination cumbersome. By eliminating the need for page reloads or switching between screens, infinite scroll offers a mobile-friendly experience that is easy to use and navigate on smaller devices.

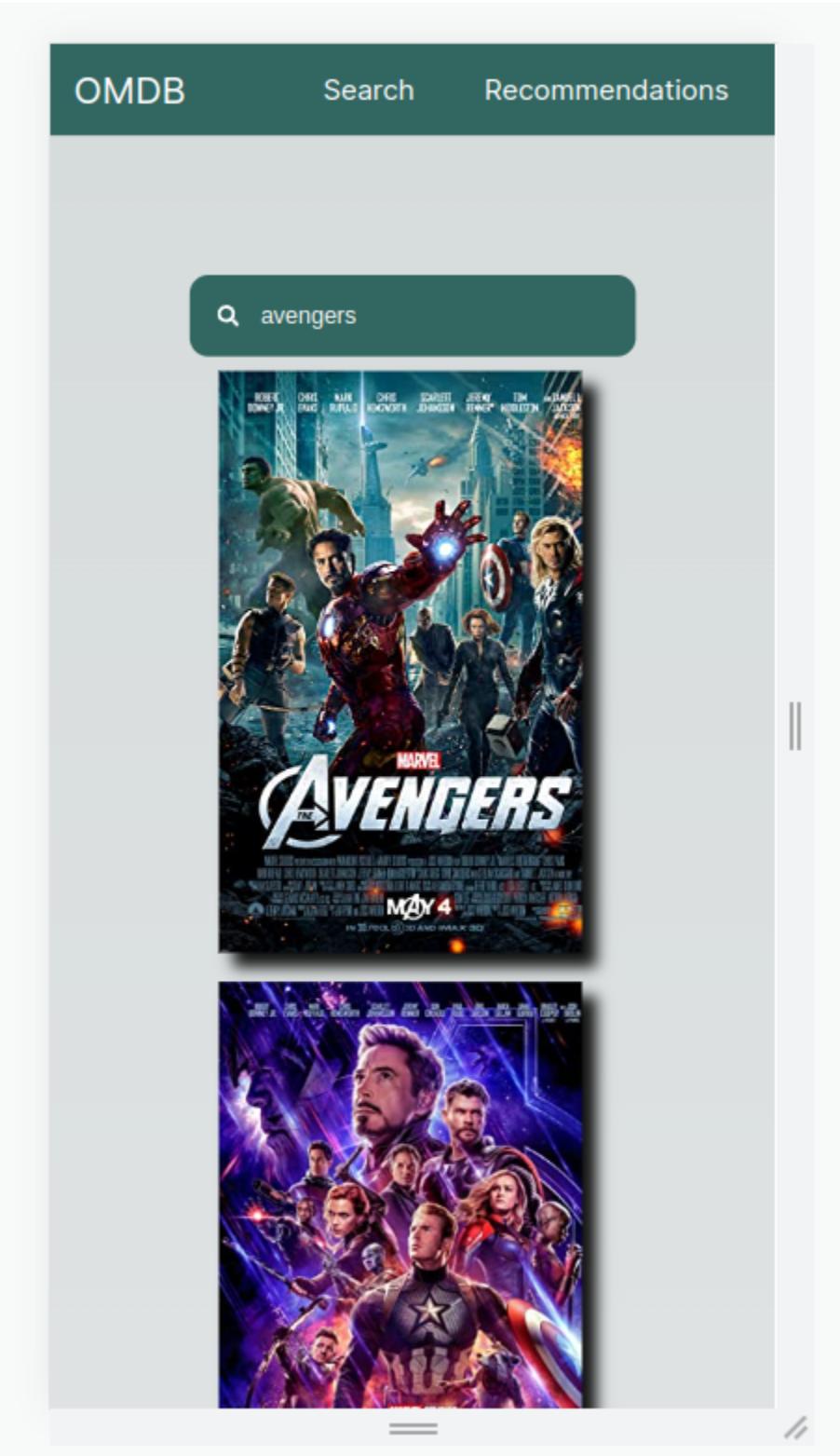


useSWR Hook

For optimizing and reducing less server requests, I have used SWR hook. It fetches results from its cache when the same key is passed again and again. This mechanism is also used in Detailed page where it's more beneficial.

Mobile View

App is not fully responsive but it can be viewed on mobile too.



Task - 2

Route

Detail of every movie can be found on this route : **/movies/{ID}**

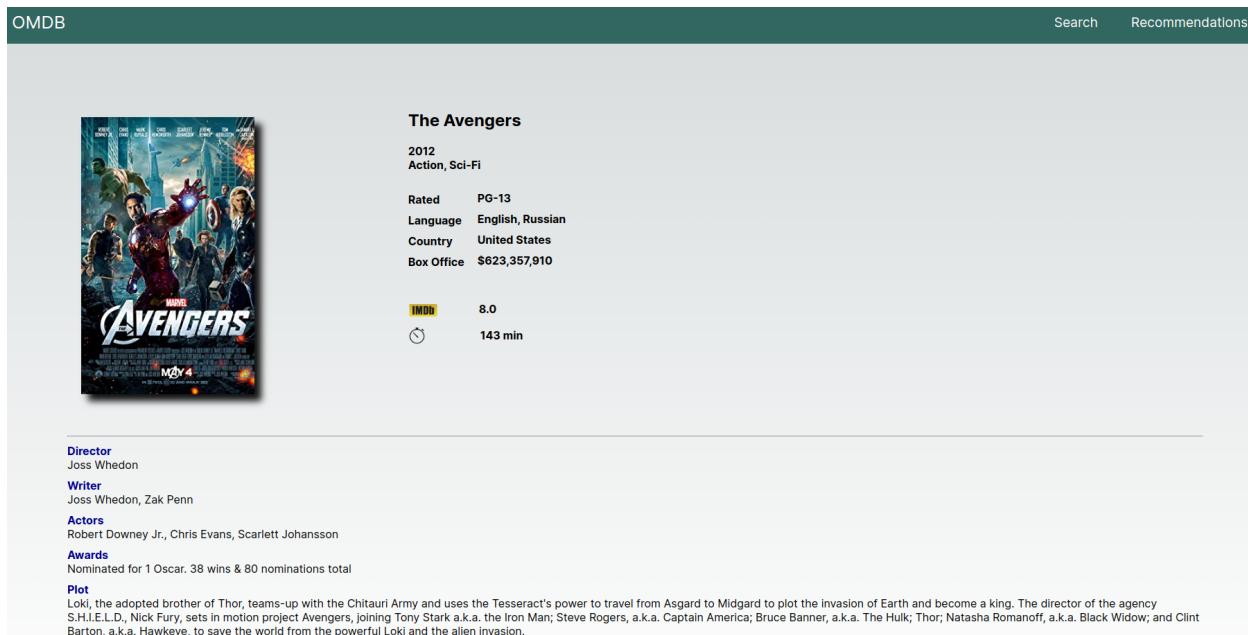
In ID we have to pass an ID of the particular movie that we have to search.

This route works from inside the app, for example, a user searches for avengers movie and upon seeing the list of result users click any of them and then he is navigated to the detail screen.

Other way can be if user has the link and by just pasting in the browser it will work.

`localhost:3000/movies/tt0848228`

Detail Screen of a Movie



The screenshot shows the OMDB movie detail page for "The Avengers". At the top, there's a navigation bar with "OMDB" on the left, "Search" in the middle, and "Recommendations" on the right. Below the navigation is a large movie poster for "The Avengers" (2012), featuring the Hulk, Iron Man, Captain America, and Thor. To the right of the poster, the movie title "The Avengers" is displayed in bold, followed by the year "2012" and genres "Action, Sci-Fi". Below this, there's a table of basic movie information:

Rated	PG-13
Language	English, Russian
Country	United States
Box Office	\$623,357,910

Below the table, there are two rating icons: "IMDB" with a score of "8.0" and "Rotten Tomatoes" with a score of "143 min".

Director
Joss Whedon

Writer
Joss Whedon, Zak Penn

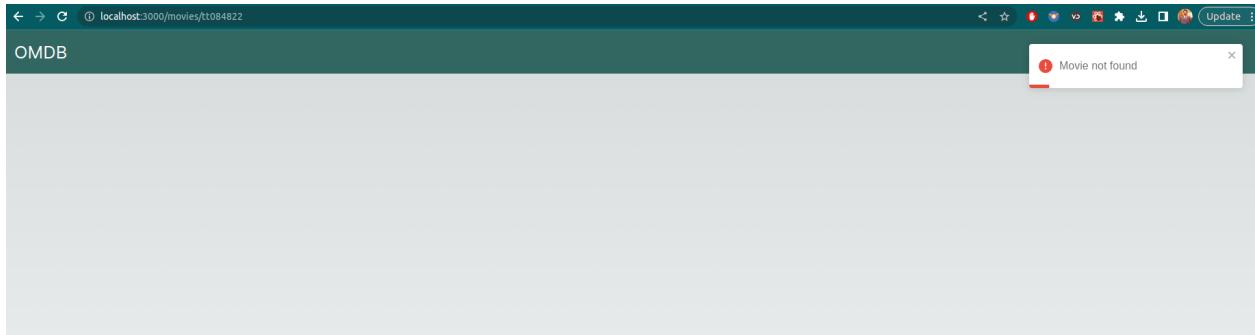
Actors
Robert Downey Jr., Chris Evans, Scarlett Johansson

Awards
Nominated for 1 Oscar. 38 wins & 80 nominations total

Plot
Loki, the adopted brother of Thor, teams-up with the Chitauri Army and uses the Tesseract's power to travel from Asgard to Midgard to plot the invasion of Earth and become a king. The director of the agency S.H.I.E.L.D., Nick Fury, sets in motion project Avengers, joining Tony Stark a.k.a. the Iron Man; Steve Rogers, a.k.a. Captain America; Bruce Banner, a.k.a. The Hulk; Thor; Natasha Romanoff, a.k.a. Black Widow; and Clint Barton, a.k.a. Hawkeye, to save the world from the powerful Loki and the alien invasion.

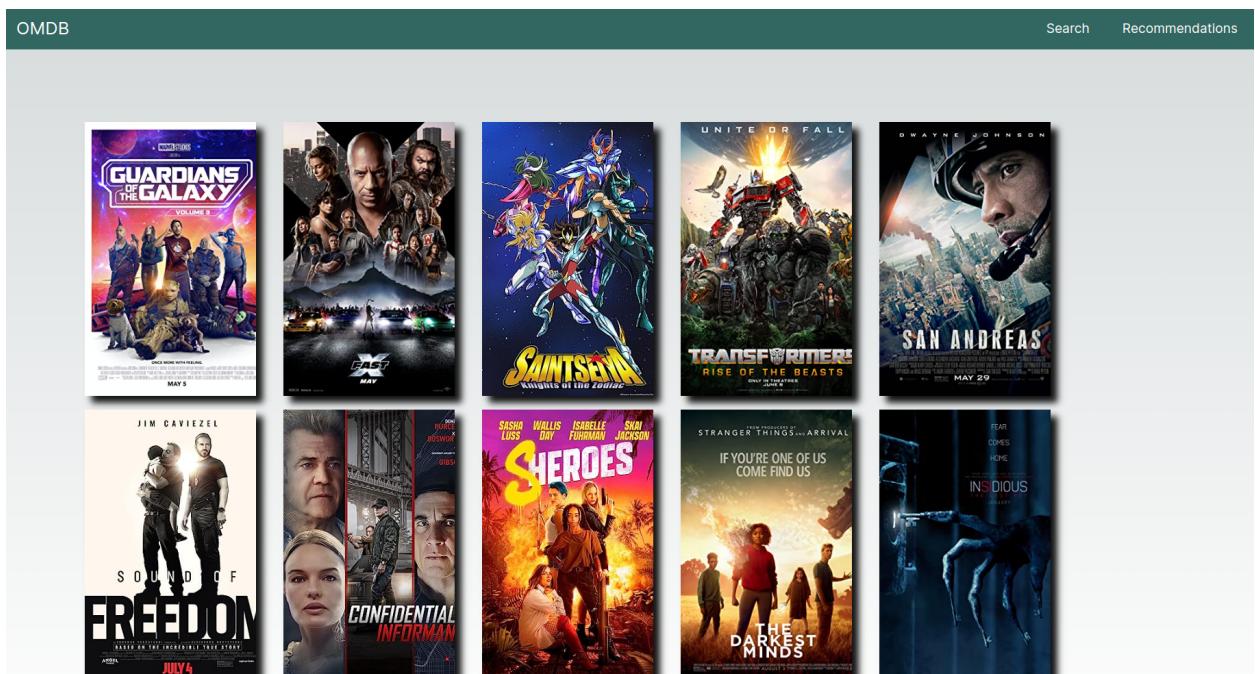
Wrong ID message

In case of wrong or invalid ID is passed in params then system responds with a toast of movie not found message.



Task - 3

For showing recommendations, I didn't find any particular API in OMDB documentation. So I used another API(**TMDB API**) to fetch 10 ten popular movies of that time. After getting their name, I used OMDB API to get its poster, id, name and year of release. I am rendering this page as static. This page will refresh its content after every 24 hours. As now this we are rendering results from static page so this would help us in improving our SEO.



Upon clicking any of these popular movies we can open its details.



Fast X

2023

Action, Adventure, Crime

Rated PG-13

Language English

Country United States, China

Box Office \$145,689,435

IMDb

5.9



141 min

Director

Louis Leterrier

Writer

Dan Mazeau, Justin Lin, Zach Dean

Actors

Vin Diesel, Michelle Rodriguez, Jason Statham

Awards

2 nominations

Plot

Dom Toretto and his family are targeted by the vengeful son of drug kingpin Hernan Reyes.