

# 2023

## CAB230 Assignment 2 Client Side



CAB230

Movies API – Client Side Application

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## Introduction

### Purpose & description

This website aims to give a comprehensive set of information on a subset of movies released since 1990. The site's interactions are made through a published REST API, the documentation for this can be found here: <http://sefdb02.gut.edu.au:3000/>. The API uses dataset based on data from sources such as IMDB, Metacritic, and RottenTomatoes.

Users can look through the movie catalogue provided on the website and gain some insight on the movie. They can see a short description of the movie's plot, the people who worked on the film and their roles, ratings from the aforementioned websites. Additionally, users who are registered can see information about cast and crew such as other movies they've worked on and IMDB ratings of the movies they were in. React modules such as Ag-grid and Chart.js were utilised to display data more cleanly and efficiently.



Home Page

The image shows the movie catalogue page. At the top, there is a red header bar with white text that reads "Home", "Movies", "Register", and "Login". Below the header is a light beige main area. The first section is titled "Movie Catalogue" in bold black text. Below it is a search bar with the placeholder "Search by title: Enter title here". Underneath the search bar, the text "Showing results: 100" is displayed. The main content is a table with 10 rows of movie data. The columns are labeled "Title", "Year", "IMDB Rating", "Rotten Tomatoes Rating", "Metacritic Rating", and "Classification". The table includes the following data:

Title	Year	IMDB Rating	Rotten Tomatoes Rating	Metacritic Rating	Classification
Kate & Leopold	2001	6.4	52	44	PG-13
The Other Side of the Wind	2018	6.7	83	78	R
A Tale of Springtime	1990	7.1	86		PG
Moon 44	1990	5	0	39	R
The Match Factory Girl	1990	7.5			Not Rated
Three Men and a Little Lady	1990	5.4	40	51	PG
Boiling Point	1990	6.7	94		Not Rated
The Adventures of Ford Fairlane	1990	6.4	25	24	R
Agneepath	1990	7.6			Not Rated
Air America	1990	5.8	13	33	R

All data is from IMDB, Metacritic and RottenTomatoes.  
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Movie Catalogue Page

### Completeness and Limitations

Features of the website include:

- Navigation – React routing was used for ease of navigation. When a user is logged in the Registration button is replaced with a Logout button and the user's email address is displayed at the header. After a user registers, they will be navigated to the login page.

When a user tries to click on the actor and crew's table, they will be redirected to the Login page if they are not logged in.

- Search – Users can easily search the movie catalogue with the search bar provided.
- Ag-grid – This was used for the tables such as the movie catalogue and the list of cast and crew. The only table that doesn't respond when a row is clicked is an actor or crew's page.
- Chart.js – This can be seen in the cast and crew page to display the IMDB Ratings of the movies they have been in.
- API End Points – All API End Points were utilised and a more detailed overview of this can be found below.
- Refresh Tokens – Refresh tokens from the API End Point is used so the user isn't logged out after ten minutes.

#### Limitations:

- The movie catalogue only shows the first 100 results of the API Endpoint.

#### Use of End Points

##### [/movies/search](#)

This API end point gives an array of objects containing information about a movie's title, year, imdbID, imdbRating, rottenTomatoesRating, metacriticRating and classification properties. All of this is then formatted into a table using the ag-grid-react module.

The screenshot shows a web application interface. At the top is a red navigation bar with links for Home, Movies, Register, and Login. Below it is a yellow header section titled "Movie Catalogue". A search bar is present with the placeholder "Enter title here". Below the search bar, the text "Showing results: 100" is displayed. A table follows, listing 10 movies with columns for Title, Year, IMDB Rating, Rotten Tomatoes Rating, Metacritic Rating, and Classification. The table data is as follows:

Title	Year	IMDB Rating	Rotten Tomatoes Rating	Metacritic Rating	Classification
Kate & Leopold	2001	6.4	52	44	PG-13
The Other Side of the Wind	2018	6.7	83	78	R
A Tale of Springtime	1990	7.1	86		PG
Moon 44	1990	5	0	39	R
The Match Factory Girl	1990	7.5			Not Rated
Three Men and a Little Lady	1990	5.4	40	51	PG
Boiling Point	1990	6.7	94		Not Rated
The Adventures of Ford Fairlane	1990	6.4	25	24	R
Agneepath	1990	7.6			Not Rated
Air America	1990	5.8	13	33	R

At the bottom of the page, a black footer bar contains the text "All data is from IMDB, Metacritic and RottenTomatoes." and "Copyright © 2023 Nicole Hordejan".

##### [/movies/data/\[imdbID\]](#)

This end point is what is called when one of the rows is clicked. This will fetch data using a get request for a movie based on its IMDB ID. It will show its title, ratings, a brief description of the plot, the year it was released, genres, runtime, country, as well as a list of cast and crew members.



Year: 2001  
 Runtime: 118 minutes  
 Genres: Comedy, Fantasy, Romance  
 Country: United States  
 Box Office: 47121859

## Kate & Leopold

IMDB Rating:

6.4/10

Rottentomatoes Rating:

52%

Metacritic Rating:

44%

An English Duke from 1876 is inadvertently dragged to modern day New York where he falls for a plucky advertising executive.

## Principals

Category	Name	Character
editor	David Brenner	
actress	Meg Ryan	Kate McKay
actor	Hugh Jackman	Leopold
actor	Liev Schreiber	Stuart Besser
actor	Breckin Meyer	Charlie McKay
director	James Mangold	
writer	Steven Rogers	
producer	Cathy Konrad	
composer	Rolf Kent	
cinematographer	Stuart Dryburgh	

1 to 10 of 10 | < < Page 1 of 1 > >|

All data is from IMDB, Metacritic and RottenTomatoes.

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</people/{id}>

This will do a get request and will give information about a person who worked on a movie based on their IMDB ID. It will show all the movies that they were, what they did in the movie, and the IMDB Rating of the

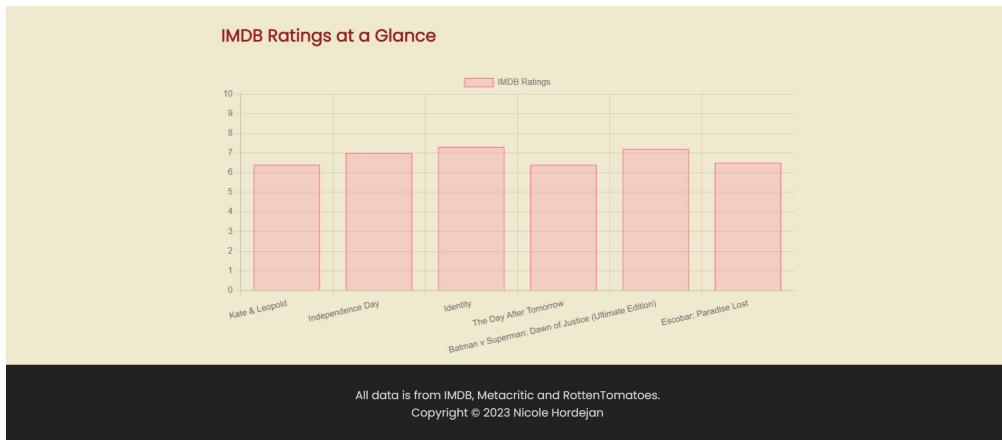
## David Brenner (1962 - 2022)

[Back to Movies](#)

### Roles

Movie name	Category	Characters	IMDb rating
Kate & Leopold	editor		6.4
Independence Day	editor		7
Identity	editor		7.3
The Day After Tomorrow	editor		6.4
Batman v Superman: Dawn of J...	editor		7.2
Escobar: Paradise Lost	editor		6.5

1 to 6 of 6 | < < Page 1 of 1 > >|



[/user/register](#)

This will create a new user account so that when that email and password is used it can get a bearer and refresh token.

Home   Movies   Register   Login

**Registration**

Name:  
Nicole

Email:  
n11378921@gmail.com

Password:  
\*\*\*\*\*

Confirm Password:  
\*\*\*\*\*

**Register**

**Registration successful**

[/user/login](#)

This will allow the user to login to an existing account and a request will be sent to get a bearer and refresh token to store locally into the website

Home   Movies   Register   Login

**Login**

Email:  
n11378925@gmail.com

Password:  
\*\*\*\*\*

**Login**

All data is from IMDB, Metacritic and RottenTomatoes.  
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[/user/refresh](#)

When a user logs in it stores a token and refresh token onto the local storage of the website. Using this endpoint will give a new bearer token by using a refresh token.

Key	Value
refreshToken	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJlbW...
token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJlbW...

[/user/logout](#)

When the user tries to logout the code will check if there is a token stored in the local storage. If it finds the token it will remove it from the local storage, so the user is logged out.

```

Attempting to log out...
try
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJlbWfpbCI6InJhc3BiZXJyeXBpMTEzNzg5MjVAZ21haWwY29tIiwidXhwIjoxNjg0
MTMyMzcyLCJpYXQiOjE2ODQwNDU5NzJ9.mYYt2bxmgu3Gqa07ZdTUwBojaAfvfUz2z4xk1WfJTTU
Logout response:
Response {type: 'cors', url: 'http://sefdb02.qut.edu.au:3000/user/logout', redirected: false, status: 200, ok: true, ...}
  
```

## Modules Used

### Ag-grid-react

This module was used for the table components of the website.

<https://www.ag-grid.com/react-grid/>

*Chart.js*

This module was used for the chart component of the website.

<https://www.chartjs.org/>

## Application Design

### Navigation and Layout

The initial designs of the website were made through Canva, which is an editing website. Only two fonts were used, and a plain manageable color scheme was used. Some considerations were made such as how movie information would be best for viewing and that the navigation header should be available for all pages. The idea for the layout of the website is for the user to be able to use the website with no complications.

Color Scheme (In order):

- #000000
- #9F1E1E
- #DFD7C7
- #EFE9CE



Fonts:

- Poppins: Bold, Regular
- TT Ramillas: ExtraBold, Bold Italics, Regular

The image consists of two vertically stacked screenshots of a movie search website. Both screenshots feature a red header bar with white text. The top header contains links for 'HOME', 'MOVIES', 'REGISTER', and 'LOGIN'. The bottom header also contains these links, plus a 'MOVIES' link in bold. Below the headers, there is a dark background image of people in a movie theater watching a 3D movie. Overlaid on this image is the text 'NICOLE HORDEJAN'S' and 'Fabulous Movie Searching Website' in a large, stylized font. A 'REGISTER' button is visible in the center. At the bottom of the image, there is a small note: 'All data is from IMDB, Metacritic, and RottenTomatoes.' The bottom screenshot shows a detailed movie listing table with multiple rows and columns. The first column has a red header, and the rest of the table has a light beige header. The table is used to display movie information, though no specific data is visible.



Released in: 1999  
Runtime: 136 MINUTES  
Genres: ACTION, ADVENTURE, FANTASY  
Country: UNITED STATES  
Box Office: 474, 544, 677

## Plan 9 From Outer Space

Make sure there is enough space in case title is big

Internet Movie  
Database

Rotten  
Tomatoes

Metacritic

**6.5 / 10**

**51%**

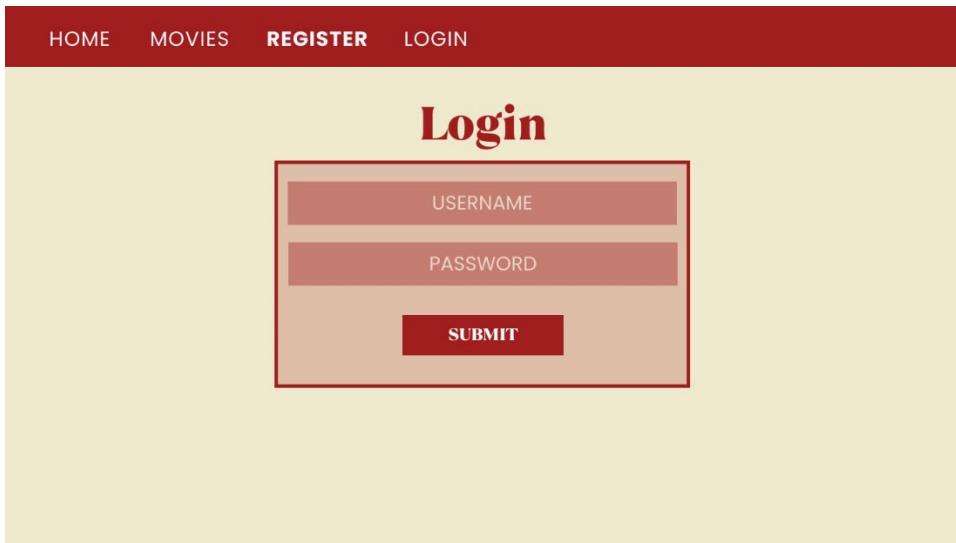
**51 / 100**

Two Jedi escape a hostile blockade to find allies and come across a young boy who may bring balance to the Force, but the long dormant Sith resurface to claim their original glory.

ROLE	NAME	CHARACTERS
Editor		

## Registration

USERNAME
EMAIL
PASSWORD
CONFIRM PASSWORD
<b>SUBMIT</b>



### Usability and Quality of Design

The User Interface was made with the theme of having a simple and clean look. The site is easy to navigate with clear labels. The user should be able to look through the website without any difficulty. The following are some clear examples of how the theme was implemented in the website:

- A **limited color palette** was used and should be consistent across different screens. This was also kept in mind so as not to overwhelm the user.
- **Common layouts** such as the ones used in the registration and login page were kept in mind so the users may use the site with familiarity.
- Elements such as buttons were made **interactive** like changing colors when hovering so that the user knows that it can be clicked.
- Only two fonts were used so the site won't look too messy and the sizes of these fonts were also considered. Examples of this are the most important parts such as the movie title having the biggest font size in the page.

### Accessibility

The website was built in a simplistic way and therefore it was able to meet most of the Priority 1 Accessibility requirements. The following is an explanation how these requirements were met and how the website may have fell short of these guidelines:

- **Provide a text equivalent for every non-text element – alternatives to images, symbols, scripts, graphical buttons, sounds, audio and video files and so on.**
- **Ensure that text equivalents are updated when dynamic content changes.**

The website mostly consists of text elements but it was unable to provide a non-text element for one part. In a movie page the user can see a poster and this has no text equivalent.

- **Ensure that all information conveyed with color is also available without color, for example from context or markup.**

Only a limited number of colors were used in the sites color scheme so the site is easily managed even in a monotone palette.

- **Organize documents so they may be read without style sheets. For example, when an HTML document is rendered without associated style sheets, it must still be possible to read the document.**

A number of style sheets were used but apart from a few instances such as the title of the movie not appearing right at the top in the movie page most of the pages can be easily read without the style sheets implemented.

- **Avoid causing the screen to flicker.**

The website's design was made with a clean and sleek image in mind, so the color scheme and overall layout was simple. Doing this ensures that no computer isn't overwhelmed by the site's graphics.

- **Use the clearest and simplest language appropriate for a site's content.**

Simple language was used for the user interface of the website to ensure that it can be easily used without instruction. Examples of this are on the registration page minimal information is required and some prompts are displayed such as "Passwords do not match".

- **For tables, identify row and column headers – clearly differentiated from the data.**

The Ag-grid-react component was used to do the tables so the users can easily read and navigate through the tables.

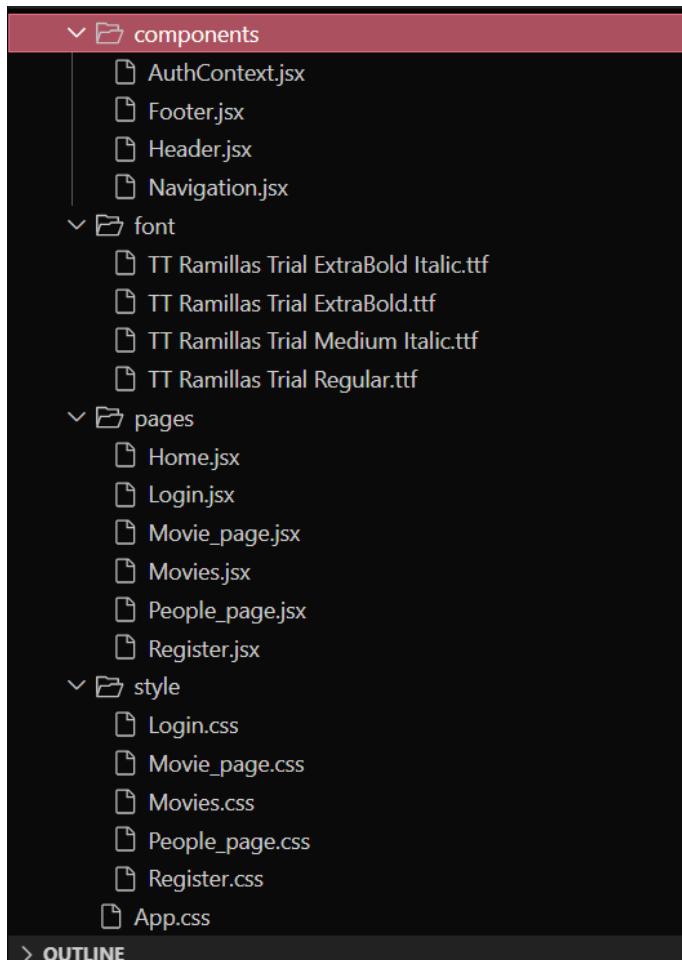
## Technical Description

### Architecture

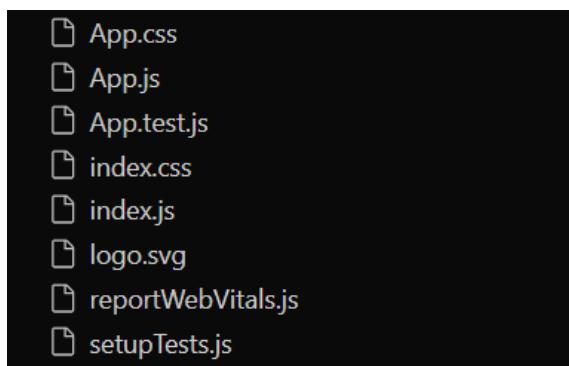
This is the basic structure commonly used in other react apps. Public contains any pictures used in the website and src holds the code for the website.

```
> └─ public
> └─ src
  └─ .gitignore
  └─ package-lock.json
  └─ package.json
  └─ README.md
```

In the src folder, four other sub folders can be found: components which stores components that are used across pages, font which stores font files, pages which are the different javascript pages of the app, and style which holds the css style sheets.



Other files of the src include the basics such as App.js and index.js.



Test plan

**Positive outcome cases**

- Loading the Movie Catalogue

The screenshot shows a movie catalogue page with a search bar at the top. A table lists various movies with columns for Title, Year, IMDB Rating, Rotten Tomatoes Rating, Metacritic Rating, and Classification. The movie 'Moon 44' from 1990 is highlighted in the results.

Title	Year	IMDB Rating	Rotten Tomatoes Rating	Metacritic Rating	Classification
Kate & Leopold	2001	6.4	52	44	PG-13
The Other Side of the Wind	2018	6.7	83	78	R
A Tale of Springtime	1990	7.1	86		PG
Moon 44	1990	5	0	39	R
The Match Factory Girl	1990	7.5			Not Rated
Three Men and a Little Lady	1990	5.4	40	51	PG
Bolting Point	1990	6.7	94		Not Rated
The Adventures of Ford Farlane	1990	6.4	25	24	R
Agapepath	1990	7.6			Not Rated
Air America	1990	5.8	13	33	R

Showing results: 100  
1 to 10 of 100 | < < Page 1 of 10 > >|

- Searching the movie catalogue

The screenshot shows a movie catalogue page with a search bar at the top. A table lists the movie 'Moon 44' from 1990 with an IMDB rating of 5, Rotten Tomatoes rating of 0, and Metacritic rating of 39. The classification is R.

Title	Year	IMDB Rating	Rotten Tomatoes Rating	Metacritic Rating	Classification
Moon 44	1990	5	0	39	R

Showing results: 1  
1 to 1 of 1 | < < Page 1 of 1 > >|

- Loading the cast and crew page

The screenshot shows a cast and crew page for the actress Lisa Eichhorn. It includes a 'Back to Movies' button and a 'Roles' section. The 'Roles' section displays a table of her movie credits, including 'Moon 44' and 'King of the Hill'. Below this is an 'IMDb Ratings at a Glance' section with a chart and a table of ratings.

Movie name	Category	Characters	IMDb rating
Moon 44	actress	Terry Morgan	5
King of the Hill	actress	Mrs. Kurlander	7.3

IMDb Ratings at a Glance  
10 IMDb Ratings  
1 to 2 of 2 | < < Page 1 of 1 > >|

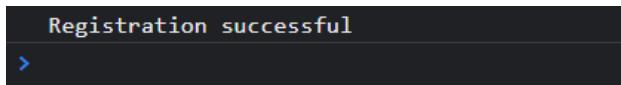
- Login Successful

```
object {  
  > bearerToken: {token: "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJlbWFpbCI6I_A4Nn0_PVOYmnuhKcRfKMVZpb9NOYuiyZ7Gwn14H4VwLvttyTQ", token_type: "Bearer", expires_in: 600}  
  > refreshToken: {token: "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJlbWFpbCI6I_A4Nn0_M8Ncqyk8iWpC0fp0zQ-94w7nd2SLltRyKBYX7rKoeI", token_type: "Refresh", expires_in: 86400}  
  > [[Prototype]]: Object}
```

- Logout Successful

The screenshot shows the browser's developer tools Network tab. It displays a log entry for a 'Logout response' with a status of 200, indicating a successful logout. The URL is 'http://sefdb02.qut.edu.au:3000/user/logout'.

- Registration Successful



## Negative outcome cases (error scenarios)

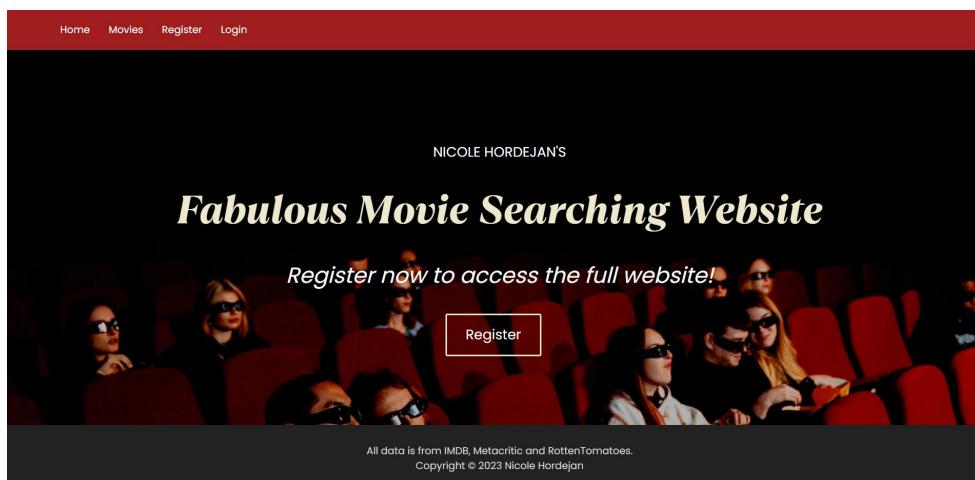
Upon testing there are no negative outcome cases but this may be due to lacking testing.

Difficulties / Exclusions / unresolved & persistent errors /

There were some difficulties in using the refresh token but it was resolved after a few trials.

## User guide

This is the landing page of the website and the first thing a user sees when they go to the site. If it's their first time in the website they should go to the register page next. After registering the website will automatically navigate to the login page. Once the user is logged in the header will have a logout button and the user's email labelled. When the user is logged in they can access the table for cast and crew but if they are not they will automatically be navigated to the login page.



Home   Movies   Register   Login

### Registration

Name:

Email:

Password:

Confirm Password:

Home   Movies   Register   Login

### Login

Email:

Password:



Home   Movies   Logout   Logged in as: n11378921@gmail.com

### Movie Catalogue

Search by title:

Showing results: 100

Title	Year	IMDB Rating	Rotten Tomatoes Rating	Metacritic Rating	Classification
Kate & Leopold	2001	6.4	52	44	PG-13
The Other Side of the Wind	2018	6.7	83	78	R
A Tale of Springtime	1990	7.1	86		PG
Moon 44	1990	5	0	39	R
The Match Factory Girl	1990	7.5			Not Rated
Three Men and a Little Lady	1990	5.4	40	51	PG
Bowing Point	1990	6.7	94		Not Rated
The Adventures of Ford Fairlane	1990	6.4	25	24	R
Agneepath	1990	7.6			Not Rated
Air America	1990	5.8	13	33	R

1 to 10 of 100 | < | Page 1 of 10 | > |

Home Movies Logout Logged in as: n11378921@gmail.com



Year: 2001  
Runtime: 118 minutes  
Genres: Comedy, Fantasy, Romance  
Country: United States  
Box Office: 47121859

## Kate & Leopold

IMDB Rating: 6.4/10      Rottentomatoes Rating: 52%      Metacritic Rating: 44%

An English Duke from 1876 is inadvertently dragged to modern day New York where he falls for a plucky advertising executive.

## Principals

Category	Name	Character
editor	David Brenner	
actress	Meg Ryan	Kate McKay
actor	Hugh Jackman	Leopold
actor	Liev Schreiber	Stuart Besser
actor	Breckin Meyer	Charlie McKay
director	James Mangold	
writer	Steven Rogers	
producer	Cathy Konrad	
composer	Rolf Kent	
cinematographer	Stuart Dryburgh	

1 to 10 of 10 | < < Page 1 of 1 > >

Home Movies Logout Logged in as: n11378921@gmail.com

## Meg Ryan (1961 - )

[Back to Movies](#)

### Roles

Movie name	Category	Characters	IMDb rating
Kate & Leopold	actress	Kate McKay	6.4
Joe Versus the Volcano	actress	DeDe, Angelica, Patricia	5.9
The Doors	actress	Pamela Courson	7.2
Prelude to a Kiss	actress	Rita Boyle	5.6
Flesh and Bone	actress	Kay Davies	6.2
Sleepless in Seattle	actress	Annie Reed	6.8
I.Q.	actress	Catherine Boyd	6.2
When a Man Loves a Woman	actress	Alice Green	6.5
French Kiss	actress	Kate	6.6
Courage Under Fire	actress	Karen Walden	6.6

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## References

Use a standard approach to referencing – see the guidance at <https://www.citewrite.qut.edu.au/cite/>.

Appendices as you require them