

ZocDoc Take Home Challenge

Imagine that you are building a website for film enthusiasts to explore the top-rated movies of the year. By integrating with our movie information API, your website should support the following use-cases:

- Discovery - users of your website can view the top 10 movies of the year at a glance
- Research - users can compare movie metadata, such as ratings, actors, etc. in order to select a film to screen
- Booking - users are able to proceed to purchase tickets to the desired movie via a button (the button's implementation is not required, the button can redirect the user to the ZocDoc homepage or another 3rd-party website)

From a functional and UX perspective, how the movies or their details interact and are displayed is entirely up to you. As long as the above requirements are met, feel free to focus on areas you're most interested in.

Considerations

- This challenge should take approximately 4 hours to complete.
- Feel free to use 3rd party libraries.
- To submit your solution: send a zip file consisting of all files necessary to run and view your code.

Your authentication token: 3b502b3f-b1ff-4128-bd99-626e74836d9c

APIs

1. Retrieve the movie set

GET <https://interview.zocdoc.com/api/1/FEE/AllMovies>

Parameters

Name	Type	Description
authToken	string	Required. A unique key that allows you to retrieve data. Your key will expire after 3 hours from initial use.

Sample Output

```
[
  {
    "Id":381,
    "Rank":1,
    "Name":"The Lives of Others",
    "Duration":"137 min",
    "Description":"In 1984 East Berlin, an agent of ...",
    "Director":"Florian Henckel von Donnersmarck",
    "Genres":[
      "Drama",
      "Thriller"
    ],
    "Actors":[
      "Martina Gedeck"
    ]
  },
  {
    "Id":262,
    "Rank":75,
    "Name":"The Intouchables",
    "Duration":"112 min",
    "Description":"After he becomes a quadriplegic ...",
    "Director":"Olivier Nakache",
    "Genres":[
      "Biography"
    ],
    "Actors":[
      "François Cluzet",
      "Omar Sy"
    ]
  },
  ...
]
```

2. Retrieve the basic movie information based on rank

GET <https://interview.zocdoc.com/api/1/FEE/MoviesByRank>

Parameters

Name	Type	Description
authToken	string	Required. A unique key that allows you to retrieve data. Your key will expire after 3 hours from initial use.
startRankIndex	int	Required. The rank of the first movie you're interested in retrieving. The movies retrieved will start at this rank. The first possible index is 1 (ie. the top movie is assigned rank 1).
numMovies	int	Required. The total number of movies to be retrieved. Movies ranked from <i>startRankIndex</i> to <i>startRankIndex + numMovies</i> will be retrieved.

Sample Output

```
[
  {
    "Id":34,
    "Rank":5,
    "Name":"The Shawshank Redemption"
  },
  {
    "Id":100,
    "Rank":6,
    "Name":"The Intouchables"
  },
  {
    "Id":55,
    "Rank":7,
    "Name":"Schindler's List"
  }
]
```

3. Retrieve detailed movie information

GET <https://interview.zocdoc.com/api/1/FEE/MovieDetails>

Parameters

Name	Type	Description
authToken	string	Required. A unique key that allows you to retrieve data. Your key will expire after 3 hours from initial use.
movieIds	Int[]	Required. The ids of the movies to be retrieved.

Sample Output

```
[
  {
    "Id":332,
    "Name":"Back to the Future",
    "Duration":"116 min",
    "Description":"A young man is accidentally ...",
    "Director":"Robert Zemeckis",
    "Genres":[
      "Adventure"
    ],
    "Actors":[
      "Michael J. Fox",
      "Christopher Lloyd"
    ]
  },
  {
    "Id":290,
    "Name":"The Green Mile",
    "Duration":"189 min",
    "Description":"The lives of guards on Death ...",
    "Director":"Frank Darabont",
    "Genres":[
      "Crime"
    ],
    "Actors":[
      "Tom Hanks",
      "David Morse",
      "Michael Clarke Duncan"
    ]
  }
]
```