



# MEGA Solution Engineer

Candidate Task – Simple Web Application

# Task Description and Rules

Build a simple web application using the Web API at <https://www.omdbapi.com/>

- You are free to develop the web application locally, or on any hosted platform. We recommend to develop at <https://jsfiddle.net/>
- All functional code **must be written in JavaScript**
- You must develop using **pure JavaScript without any additional libraries**. Please use the native **fetch()** or **XMLHttpRequest()** APIs to interact with the Web API.
- You may use **any CSS library you wish** to assist with the appearance of your application. **Do not spend too much effort on styling** as we are **mainly interested in functionality**
- You must **present your web application** to us, **walking us through the code** and **explaining how it works** using **non-technical language**
- In your presentation, please **discuss any improvements** that you would suggest to add **more functionality** to the web application. Also, are there any additional functionalities that you think would be nice to have on the Web API?

# Task Specification – User Interface

- The user interface should consist of a search bar and a display area for search results.
- Users should be able to enter a movie title (or part of) into the search bar and see the corresponding movie titles and poster images displayed in the search results.
- Prior to displaying the search results, any previous search results in the display area should be cleared
- The application should handle errors gracefully and provide feedback to the user if the search fails, such as if the API is down or if the search criteria produces no results.

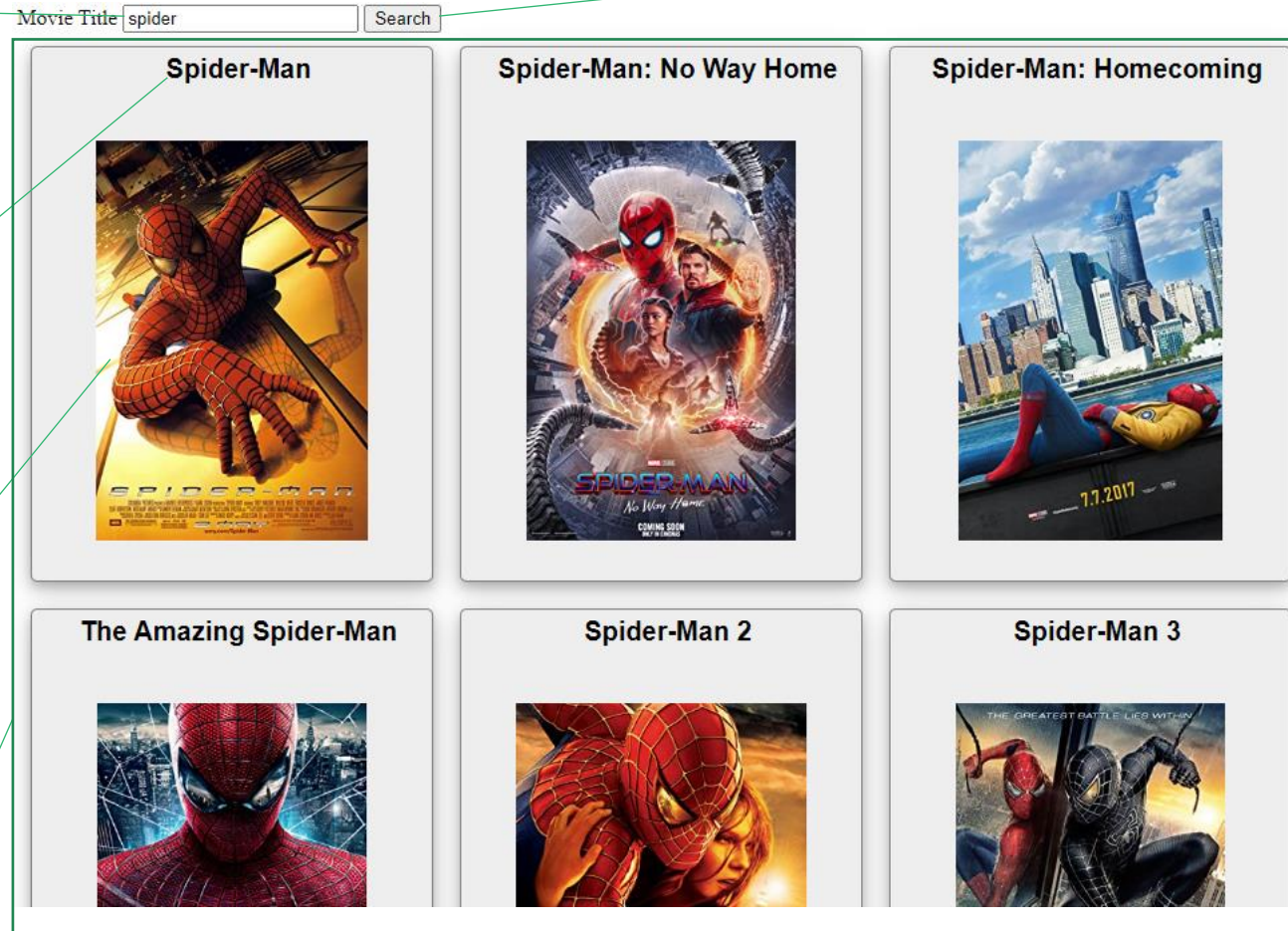
# Task Specification – User Interface Mock-up

Search bar  
for user to  
type search  
string

Movie Title

Movie Poster

Display Area



Button to start search.

Previous search results  
should be cleared  
before showing new  
ones.

Display an appropriate  
message in the results  
area if no results are  
found.

# Task Specification – Web API

- The web application should connect to a third-party web API <https://www.omdbapi.com>, that provides movie data.
- The API has a method that can receive a movie title as search criteria and return a list of movies that match the title, along with their poster images and other data.

# Task Specification – Web API Key

- Acquire a free API Key to use the API at <https://www.omdbapi.com/apikey.aspx>

## API Key

10/05/22 Email Delays! If your requested key doesn't show up within an hour, please contact me directly.

### Generate API Key

Account Type

☐ Patreon
   
☒ FREE! (1,000 daily limit)

Email

Name

First Name

Last Name

Use

A short description of the application or website that will use this API.

Submit

# Task Specification – Web API Documentation

- API Documentation available here <https://www.omdbapi.com/#parameters>

## Parameters

### By ID or Title

Parameter	Required	Valid Options	Default Value	Description
i	Optional*		<empty>	A valid IMDb ID (e.g. tt1285016)
t	Optional*		<empty>	Movie title to search for.
type	No	movie, series, episode	<empty>	Type of result to return.
y	No		<empty>	Year of release.
plot	No	short, full	short	Return short or full plot.
r	No	json, xml	json	The data type to return.
callback	No		<empty>	JSONP callback name.
v	No		1	API version (reserved for future use).

\*Please note while both "i" and "t" are optional at least one argument is required.

### By Search

Parameter	Required	Valid options	Default Value	Description
s	Yes		<empty>	Movie title to search for.
type	No	movie, series, episode	<empty>	Type of result to return.
y	No		<empty>	Year of release.
r	No	json, xml	json	The data type to return.
page <small>New!</small>	No	1-100	1	Page number to return.
callback	No		<empty>	JSONP callback name.

# Task Specification – Web API Usage

- Your web application will use the 'By Search' parameters of the Web API to return a JSON array of movie titles containing a search string typed into the application by the user. e.g.  
[http://www.omdbapi.com/?apikey=\[yourAPIkey\]&s=spider](http://www.omdbapi.com/?apikey=[yourAPIkey]&s=spider)
- You can use the **Title** and the **Poster** values from each item in the Search result to build the list of movies in the display area

Example JSON result:

```
{
  Response: "True",
  Search: [
    {
      imdbID: "tt0145487",
      Poster: "https://m.media-amazon.com/images/M/MV5BZDEyN2NhMjgtMjdhdhNi00MmNlLWE5YTgtZGE4MzNjMTRlMGEwXkEyXkFqcGdeQXVyNDUyOTg3Njg@._V1_SX300.jpg",
      Title: "Spider-Man",
      Type: "movie",
      Year: "2002"
    },
    {
      imdbID: "tt10872600",
      Poster: "https://m.media-amazon.com/images/M/MV5BZWMyYzFjYTYtNTRjYi00OGExLWE2YzgtOGRmYjAxZTU3NzBiXkEyXkFqcGdeQXVyMzQ0MzA0NTM@._V1_SX300.jpg",
      Title: "Spider-Man: No Way Home",
      Type: "movie",
      Year: "2021"
    }
  ],
  totalResults: "662"
}
```