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# **Software Requirements Specification**

**for  
OMDB**

**Version 1.0**

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## Revision History

Name	Date	Reason For Changes	Version
Yeong Wei Song	27/1/2023	First version	1.0

## **1. Introduction**

Online Movie Database App, also known as OMDB, is an online movie database web application. It provides information about different genres of movies to the user. The information includes movie title, movie rating and movie recommendation.

### **1.1 Purpose**

The purpose of the Software Requirements Specification is to provide agreement on what the software product or the portion of the product to be implemented in software is to do. Specifically, it provides a means of:

- communications among the project owner and the development team,
- supporting software design and software quality assurance activities,
- supporting system testing activities,
- supporting Verification and Validation activities, and
- supporting a controlled system evolution

### **1.2 Intended Audience**

- Project stakeholders: Business owners, product managers, and other decision-makers who need to understand the software's capabilities and requirements.
- Development Team: Software developers, testers, and other technical personnel who need to know the software's specifications in order to build and test it.
- Customers: End-users and customers who will use the software and need to know what to expect from it
- Regulators: Regulatory agencies that need to ensure that the software complies with legal and industry standards

### **1.3 Project Scope**

OMDB app will be designed to have an independent system that will present sincere ratings on various different movies. It recommends movies based on users' preferences. This product will show the titles, posters and ratings. This product will provide the top 20 popular movies in the home page. It will provide a search box for the users to search for the movies. However, this movie app is not a streaming application, it does not offer any streaming services.

## **1.4 Terms, Definitions, and Acronyms**

### **Algorithm**

Algorithm is a finite sequence of rigorous instructions to a computer, typically used to solve a class of specific problems or to perform a computation.

### **Full Stack Web Application**

Full stack web application is defined as an web application that includes both the front end and back end of an application. The front end is usually accessed by a client, and the back end forms the core of the application where all the business logic is applied.

### **Front-end View**

Front-end View refers to the graphical user interface of a website, through the use of HTML, CSS, and JavaScript, so that users can view and interact with the web application.

### **Back-end Server**

The back-end is the portion of the web application the users won't be able to see. It's responsible for storing and organizing data, and ensuring everything on the client-side actually works.

### **User Interface Design (UI design)**

User interface design is the design of user interfaces for machines and software, such as computers, home appliances, mobile devices, and other electronic devices, with the focus on maximizing usability and the user experience.

### **Application Programming Interface (API)**

Application programming interface (API) is a way for two or more computer programs to communicate with each other. It is a type of software interface, offering a service to other pieces of software.

## **2. Overall Description**

### **2.1 Product Perspective**

OMDB app is a self-contained, full-stack web application with proper design of front-end view and back-end server ready. It will not interface with another system. It provides a variety of movie information for the users. Without streaming services injected into the web application, if users wish to watch the movie, they can use it with other streaming apps like Netflix, Disney+, fubo TV... etc while OMDB app provides the most comfortable view in regard to the movie details.

### **2.2 Product Features**

OMDB web app will differentiate the users into two user groups which are admin and general user. Admin will be able to perform all the tasks that a normal user can perform. The web app will include a recommender system which gives movie recommendations to the users based on their preferences.

### **2.3 User Classes and Characteristics**

Expected users include the people who wish to understand more about certain specific movies. Their skill levels are expected to vary from each other. Hence, the UI design of the web application will focus on simplicity with a common navigation bar and the only main view. However, users are still required to know to press enter when they are done entering the search value in the search box and understand that providing an empty search value will be navigating the web page to the home page. Admin class users are expected to understand that OMDB web app will not provide features of deleting a user from the database. Lastly, all user groups are expected to understand that registered email should be in valid format and the password should contain 8-15 characters, at least one lowercase, at least one uppercase, at least one number and at least one special character.

### **2.4 Operating Environment**

The system is intended to be operated on any Windows-based computer. Users are recommended to have a stable internet connection for ensuring the best experience with this web app.

## **2.5 Design and Implementation Constraints**

1. User Experience:
  - a. User-friendly interface for movie search and discovery
  - b. Accessibility for users with disabilities
2. Technical Constraints:
  - a. Integration with a third-party movie database API
  - b. secure user authentication and authorization
  - c. Data privacy and security measures
  - d. Performance optimization for efficient use of network and device resources
3. Content Constraints:
  - a. Compliance with copyright and intellectual property laws
  - b. Appropriate movie ratings
  - c. Regular updates and maintenance of movie information and reviews

## **2.6 Assumptions and Dependencies**

- TMDB API is required to fetch the movie data to OMDB app and so the web app could display the title, poster and rating of the movie
- This application is fully developed in Visual Studio with .Net Core and Node JS installed

## **3. System Features**

The completed OMDB app will provide the following functionality to all users (in general) and will include the ability to:

- View different movie with title and rating
- Search for movies

Specific functionality for admin will include the ability to:

- Create new user account
- Create new admin account

## **4. Non-Functional Requirements**

### **Usability**

System design focuses on comfortable UX and reasonably pleasing UI. It makes sure the users will not get confused by the UI design of the system. Soft colors are chosen for the graphical user interface with dark background that reduces eye strain while users use the web app in the dark environment.

## **5. External Interface Requirements**

### **5.1 Hardware Interfaces**

A computer device with a stable internet connection will be required to launch the OMDB web application.

### **5.2 Communication Interfaces**

The Communication between the front-end and back-end is done through a proxy server.