TEST PLAN

IMDb API Service

Abstract

This document provides an overview of the testing to be done for IMDb API services.

**VERSION HISTORY**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Version #** | **Written by** | **Revision Date** | **Approved By** | **Approval Date** | **Outline** |
| 1.0 | *Gaurav Chaudhari* |  |  |  | Test Plan |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

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# INTRODUCTION

The Test Plan is designed to prescribe the scope, approach, resources, and schedule of all testing activities of the IMDb API services.

The plan identify the items to be tested, the features to be tested, the types of testing to be performed, the personnel responsible for testing, the resources and schedule required to complete testing, and the risks associated with the plan.

# TEST STRATEGY

## Scope of Testing

* + 1. **Feature to be tested**

All the api end points of IMDb Api services which were defined in software requirements specs are needed to be tested

|  |  |  |
| --- | --- | --- |
| **Endpoint Name** | **Applicable Roles** | **Description** |
| **GET/movies** | Admin  User | **Admin:** An Admin should be able to view data regarding newly added movies, edited movies and removed movies.  **User:** A user should be only able to view the added and edited movies. |
| **GET/movie/<id>** | Admin  User | **Admin:** An Admin should be able to view data regarding newly added movies, edited movies and removed movies as per specific id.  **User:** A user should be only able to view the added and edited movies with respect to the specific id. |
| **PUT/movie** | Admin  User | **Admin:** An Admin should be able to update data regarding newly added movies and edited movies.  **User:** A user should be only able to view the updated data of added and edited movies. |
| **POST/movie** | Admin  User | **Admin:** An Admin should be able to add new movie data.  **User:** A user should be only able to view the added data of movies. |
| **DEL/movie/<id>** | Admin  User | **Admin:** An Admin should be able to delete movie data as per specific id.  **User:** A user should be only able to view the added data of movies as per specific id. |

## Feature not to be tested

These feature are not be tested because they are not included in the software requirement specs

* + - * User Interfaces
      * Hardware Interfaces
      * Communication Interface
      * Website Security and Performance

## Test Type

In the project, there’re one type of testing should be conducted.

* + **API testing:** Test all the APIs

## Risk and Issues

|  |  |
| --- | --- |
| **Risk** | **Mitigation** |
| **Team member lack the required skills for API testing.** | Plan **training course** to skill up team members |
| **Some edge Test cases may be missed.** | Test cases should be designed, reviewed and approved before starting the testing. |

## Test Logistics

## Who will test?

We should usemembers having API testing knowledge to save the training cost from project cost.

## When will test occur?

The tester will start the test execution when all the following inputs are ready

* API are ready for testing.
* Test Environment is built.
* Enough human resource are available for testing

# TEST OBJECTIVE

The test objectives are to **verify** the endpoints of API that produce appropriate desired data after hitting the endpoints. Addition of new movies, editing the added movies and deleting the added movies should only be done by Admin. User should only be able to view the data.

# TEST CRITERIA

## Suspension Criteria

If the team members report that there are **40%** of test cases **failed**, suspend testing until the development team fixes all the failed cases.

**3.2 Entry Criteria**

- All the high priority test cases should be passed by dev while dev testing.

- Stable env should be available for testing.

- Test cases should be approved.

## Exit Criteria

Specifies the criteria that denote a **successful** completion of a test phase

* **Run** rate is mandatory to be **100%** unless a clear reason is given.
* **Pass** rate is **90%,** achieving the pass rate is **mandatory**.

# RESOURCE PLANNING

## System Resource

|  |  |  |
| --- | --- | --- |
| **No.** | **Resources** | **Descriptions** |
| **1.** | Postman | Postman should be installed . |
| **2.** | Tracking tool | JIRA board should be created and all the team members should have access enable to the board. |
| **3.** | Network | Setup a LAN Gigabit and 1 internet line with the speed at least 10 Mb/s |
| **4.** | Computer | At least 4 laptops running on Windows 10, Ram 8GB. |

## Human Resource

|  |  |  |
| --- | --- | --- |
| **No.** | **Member** | **Tasks** |
| **1.** | Test Manager | Manage the whole project Define project directions  Acquire appropriate resources |
| **3.** | Developer | Implement the high priority test cases, write API according to requirements. |
| **4.** | Test Administrator | Builds up and ensures test environment and assets are managed and maintained  Support Tester to use the test environment for test execution |
| **5.** | QA members | Take in charge of quality assurance  Check to confirm whether the testing process is meeting specified requirements |

# 

# TEST ENVIRONMENT

The Test Environment should be setup as below:

* + - 1. Env should be dev tested to ensure that it is stable enough to start testing.
      2. No deployments to be done unless QA team is informed to pause testing.

# SCHEDULE & ESTIMATION

## All project task and estimation

|  |  |  |
| --- | --- | --- |
| **Task** | **Members** | **Estimate effort** |
| **Create the test specification** | Test Designer | 3 days |
| **Perform Test Execution** | Tester, Test Administrator | 2 days |
| **Test Report** | Tester | 7 hrs |
| **Total** |  | **6 days** |

## 

# TEST DELIVERABLES

Test deliverables are provided as below

## Before testing phase

* Test plans document.
* Test cases documents
* Test Design specifications.
* Share high priority test cases with dev team

## During the testing

* Test Tool
* Test Data
* Test Trace-ability Matrix
* Error logs and execution logs.

## After the testing cycles is over

* **Test Results/reports**
* Defect Report
* Installation/ Test procedures guidelines

## Release notes