

Software Test Plan

IMDB

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1. Introduction

a. Document overview

The Software Test Plan (STP) outlines the testing approach, objectives, and methodologies for the Quality Assurance (QA) automation testing of the IMDb website. IMDb is a popular online database for movies, TV shows, and video games, providing users with information about cast, crew, plot summaries, and reviews.

b. Project overview

The IMDb website is a critical platform for users to access and discover information about a wide range of media content. The STP aims to ensure that the IMDb website functions effectively, providing users with a seamless and reliable experience. It defines the scope of testing, identifies testing objectives, and outlines the testing approach to be followed.

c. project references

The purpose of this STP is to:

Define the scope and objectives of the QA automation testing for the IMDb website.

Identify the roles and responsibilities of the testing team.

Outline the testing approach and methodologies to be used.

Specify the test environment, including hardware, software, and network configurations.

Detail the test deliverables, including test cases and defect reports.

Establish a timeline for testing activities.

Identify potential risks and mitigation strategies.

Define metrics for measuring the effectiveness of the testing process.

2. Test Strategy

a. Test Objectives

- i. Search Functionality: Ability to search for movies, TV shows, actors, directors, and other content.
- ii. Title Pages: Pages dedicated to individual movies, TV shows, and other content, including details such as plot summaries, cast and crew information, user ratings, and reviews.
- iii. User Ratings and Reviews: Functionality for users to rate and review movies, TV shows, and other content.
- iv. Watchlist: Feature that allows users to create a watchlist of movies and TV shows they want to watch.
- v. Recommendation Engine: Algorithm that suggests movies, TV shows, and other content based on user preferences and viewing history.
- vi. News and Articles: Section for entertainment news, interviews, and articles related to movies, TV shows, and celebrities.
- vii. Top Charts: Lists of top-rated movies, TV shows, and other content based on user ratings and reviews.
- viii. Celebrity Pages: Pages dedicated to individual actors, directors, and other celebrities, including biographical information and filmography.
- ix. Trailers and Clips: Videos of movie trailers, interviews, and behind-the-scenes clips.
- x. Accessibility: Ensuring the website is accessible to users with disabilities, including compliance with accessibility standards.

b. Test Assumption

- i. Accurate Information: Movie details, actor information, and other content on IMDb are assumed to be accurate and current.
- ii. Effective Search: The search function is assumed to provide relevant and correct results for movies, TV shows, actors, etc.
- iii. Valid User Credentials: Users have valid credentials for authentication, and the login mechanism works as expected.

- iv. Watchlist Reliability: The watchlist feature is assumed to let users manage their movie and TV show selections without issues.
- v. Recommendation Precision: The recommendation engine is assumed to accurately suggest content based on user preferences.
- vi. User Reviews Integrity: User ratings and reviews are assumed to be gathered accurately and displayed correctly.
- vii. Top Charts Authenticity: Top charts are assumed to reflect actual user ratings, giving a current ranking of popular content.
- viii. Timely News Updates: Entertainment news and articles are assumed to be regularly updated for relevance.
- ix. Celebrity Page Accuracy: Celebrity pages are assumed to provide accurate biographical and filmography details.
- x. Accessibility Standards: IMDb is assumed to follow accessibility standards, making the website usable for people with disabilities.
- xi. Mobile-Friendly Interface: The IMDb application is assumed to work well on various mobile devices, providing a user-friendly experience.

c. Test Types

- i. The following test types will be performed: Functional Testing: Testing the functionality of the website, including search, navigation, and user interaction.
- ii. Usability Testing: Testing the website's ease of use and user interface design.
- iii. Compatibility Testing: Testing the website on different browsers, devices, and operating systems.
- iv. Performance Testing: Testing the website's performance under various load conditions.
- v. Security Testing: Testing the website for vulnerabilities and ensuring data security.
- vi. Accessibility Testing: Testing the website for compliance with accessibility standards.

d. Test Approach

The testing approach for the IMDb website will be a combination of manual and automated testing. Manual testing will be used for exploratory testing, usability testing, and other scenarios where human judgement is required. Automated testing will be used for regression testing, performance testing, and other repetitive tasks.

e. Data Approach

Test data will be carefully selected to ensure thorough testing of different scenarios, including edge cases and boundary conditions. Mock data may be used for testing certain functionalities.

f. Levels of Testing

The testing will be conducted at multiple levels, including:

- Unit Testing: Testing individual components and functions of the website.
- Integration Testing: Testing the integration of components to ensure they work together correctly.
- System Testing: Testing the website as a whole to ensure it meets the specified requirements.
- User Acceptance Testing (UAT): Testing with actual users to ensure the website meets their needs and expectations.

Test Deliverables

| Deliverable Name | Author | Review |
|--|-----------|-------------------------------|
| Test Plan | Test Lead | Project Manager |
| Functional and Non-Functional Test Cases and STD | Test Team | Test Lead |
| Bug Reports in Jira | Test Team | Test Lead and Developers Lead |
| STR | Test Lead | Project Manager |

3. Execution Strategy

a. Entry and Exit Criteria

Entry Criteria for IMDb Testing:

1. Understanding Requirements: Clear understanding of IMDb project requirements and functionalities.
2. Environment Ready: Testing environment is set up, including servers, databases, and required configurations.
3. Test Data Prepared: Relevant and diverse test data is prepared and available for testing scenarios.
4. Test Documentation Ready: Test cases and scripts are documented, outlining various test scenarios.
5. Testing Tools Installed: Testing tools, including automation tools, are installed and configured.
6. Team Availability: Testing team, developers, and necessary stakeholders are available for collaboration.
7. Application Build Deployed: Initial build of the IMDb application is deployed to the testing environment.
8. Smoke Test Passed: Basic functionality, checked through a smoke test, shows stability.

Exit Criteria for IMDb Testing:

1. Test Execution Completed: All planned tests, encompassing positive and negative cases, are executed.
2. Defects Resolved: Identified defects are fixed, retested, and confirmed as closed.
3. Test Summary Report Generated: A comprehensive test summary report is generated, summarising testing activities and results.
4. Performance Goals Met: Performance testing confirms that the application meets predefined criteria.
5. Security Standards Adhered: Security testing ensures the application complies with established security standards.
6. Usability and Accessibility Confirmed: Usability and accessibility testing verify that the application meets user-friendly and accessibility standards.
7. Acceptance Criteria Satisfied: The application aligns with the acceptance criteria defined by stakeholders.

8. Documentation Complete: All testing documentation, including test cases and plans, is complete and accurate.
9. Release Ready: The IMDb application is deemed ready for release based on testing outcomes and stakeholder approval.

b. Validation and Defect Management

Defects found during testing will be logged in a defect tracking system and prioritized based on their severity and impact on the website.

c. Defect tracking & Reporting

Test results, including test cases, test execution status, and defects, will be documented and reported regularly to stakeholders.

4. SCHEDULE & ESTIMATION

| Task | Objective | Expected Completion Date |
|---|---|--------------------------|
| Test Plan | Thorough test plan for validation. | 22/02/2024 |
| Test DesignTest Case and Development | Structured design, case creation, development. | 24/02/2024 |
| Test Execution phase 1: Sign In & Login | Ensure robust software functionality and performance. | 01/03/2024 |
| Test Execution phase 2: Search & Watchlist | Validate IMDb search and watchlist. | 01/03/2024 |
| Test Execution phase 3: Language & Social Media | Validate IMDb language and social integration. | 01/03/2024 |
| Selenium grid - Parallel | Parallel test execution using Selenium Grid. | 02/03/2024 |
| Defect Management | Systematic tracking and | 03/03/2024 |

| | | |
|--------------|--|------------|
| | resolution of defects. | |
| Test Report | Concise report detailing testing outcomes. | 03/03/2024 |
| presentation | Concise delivery of key information. | 04/03/2024 |

5. TEST MANAGEMENT PROCESS

a. Test Management Tools

Test automation will be used to automate repetitive and time-consuming tasks, such as regression testing and performance testing. Selenium WebDriver will be used for automated testing, along with other tools and frameworks as needed.

b. Role Expectations

| Roles | Name |
|-----------------|-------------------|
| Project Manager | tzahi anidgar |
| Test Lead | tzahi anidgar |
| Testing Team | Thara'a Abu Saleh |

c. Project Management

- responsible for reviewing and approving the content of the Test Plan, Test Strategy, and Test Estimates. They provide their sign-off to indicate their endorsement and acceptance of these documents.

d. Test Planning (Test Lead)

- Before beginning the execution, verify that entrance criteria are employed as input.
- Develop test plans and the guidelines to create test conditions, test cases, expected results and execution scripts.
- Inform the testing team about any necessary modifications to the test deliverables or application and specify the expected completion timelines.

- Provide approval to commence the subsequent phase of testing.

e. **Test Team**

- Develop test conditions, outline test cases, specify expected results, and generate execution scripts.
- Recognize, document, and prioritize defects in accordance with the instructions given by the Test Lead.

6. Test Environment

The test environment will replicate the production environment as closely as possible, including hardware, software, and network configurations.

7. Approvals

| Name | Role | Signature |
|---------------|--------------------|-----------|
| tzahi anidgar | Project Management | |
| tzahi anidgar | Test Lead | |
| - | Business Analyst | |