**STP Document**



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**Planned Schedule**

|  |  |  |
| --- | --- | --- |
| A step in the project process | Start date | End date |
| Preparation of STP document | **25.02.2024** | **27.02.2024** |
| Preparation of STD document | **25.02.2024** | **27.02.2024** |
| Round of tests #1 | **26.02.2024** | **26.02.2024** |
| Round of tests #2 | **27.02.2024** | **27.02.2024** |
| Round of tests #3 | **28.02.2024** | **28.02.2024** |
| Preparation of STR document | **28.02.2024** | **28.02.2024** |

**Purpose Of This Document**

The purpose of the document is to define a framework program for testing This framework plan will include all relevant topics for planning and performing the tests, such as the test topics and types of tests, the schedule, and the planned work method for testing the system.

The document will also be used for writing a detailed test plan (STD) in which the various tests will be detailed step by step. After that, the tests will be carried out according to the instructions in this document.

**Description Of the goodreads site**

Goodreads is the world's largest site for readers and book recommendations. Our mission is to help people find and share books they love. If you're looking for a place to discover a great book or to discuss your favorite books with a community of readers, you've found the right place!

A Few Things You Can Do On Goodreads**:**

* **See what books your friends are reading.**
* **Track the books you're reading, have read, and want to read.**
* **Check out your personalized book recommendations. Our recommendation engine analyzes 20 billion data points to give suggestions tailored to your literary tastes.**
* **Find out if a book is a good fit for you from our community’s reviews.**

**Key Features and Functions:**

**Book Reviews and Ratings**: Users can read and write reviews for books, providing insights and opinions. Each book has a rating based on user reviews, which helps in decision-making for potential readers.

**Reading Lists/Bookshelves**: Users can create personalized bookshelves to organize their reading. These can include books they've read, want to read, or are currently reading.

**Recommendations**: Goodreads offers personalized book recommendations based on a user's reading history and preferences.

**Social Networking**: Users can connect with friends to see what they are reading, share recommendations, and discuss books.

**Reading Challenges**: Goodreads hosts annual reading challenges where users can set a goal for the number of books they want to read in a year.

**Author Pages and Interaction**: Authors can have their own pages on the site, allowing them to interact with readers, promote their books, and provide updates.

**Groups and Discussions**: Users can join groups based on interests or specific books and participate in discussions.

**Book Giveaways**: Publishers and authors often host giveaways on Goodreads, giving users a chance to win free books.

**Quotes:** Users can browse and share favorite quotes from books.

**Events**: Information about book-related events, such as author signings and book fairs, is available.

**Book Discovery and Browsing**: Users can discover new books by browsing genres, lists, and seeing what's popular or trending.

**Mobile App**: Goodreads offers a mobile app for convenient access on the go.

**Integration with E-readers and Online Bookstores**: The site often integrates with e-readers and online bookstores for easy purchase and syncing of books.

**Author Interviews and Q&As**: Exclusive interviews and Q&A sessions with authors are sometimes featured.

**News and Articles**: Goodreads provides news and articles related to books and authors.

**Stakeholders:**

**Users/Readers**: The primary stakeholders, they use Goodreads to discover books, track their reading, and connect with other readers. Their engagement and satisfaction are crucial for the site's success.

**Authors**: Both established and emerging authors use Goodreads to promote their books, interact with readers, and build their reader base. The platform is a key marketing tool for many authors.

**Publishers**: Book publishers use Goodreads for promoting titles, organizing book giveaways, and gauging market trends and reader preferences. They are interested in the data and insights Goodreads can provide about reader habits and interests.

**Booksellers and Online Retailers**: Retailers, including online giants like Amazon (which owns Goodreads), are stakeholders since the platform can directly influence book sales. Goodreads provides links for purchasing books, which can drive significant traffic to retailers.

**Librarians**: They use Goodreads for book recommendations, keeping up with trends, and managing their library's collection. Goodreads can be a tool for librarians to understand what's popular and what might be good to add to their collections.

**Advertisers and Marketers**: Given Goodreads' large user base of avid readers, it's an attractive platform for advertisers, especially those in the publishing industry.

**Employees and Management**: The team that operates and develops Goodreads, from the site's management to its developers and customer service staff. They are crucial for the ongoing maintenance and innovation of the platform.

**Investors and Shareholders**: Since Goodreads is owned by Amazon, its investors and shareholders have a stake in the platform's performance and its contribution to Amazon's overall business.

**Tech and Data Analysis Companies**: These stakeholders are interested in the user data generated by Goodreads for market research, user behavior analysis, and technological improvements.

**Literary Communities and Book Clubs**: Many literary groups and book clubs use Goodreads as a platform to organize, discuss, and select books.

**Educational Institutions and Researchers**: Schools, colleges, and researchers might use Goodreads for educational purposes, research on reading habits, and literature studies.

**Partners and Affiliates**: Various business partners and affiliates, including those involved in cross-promotions or integrated services (like e-reader manufacturers), are also stakeholders.

**Glossary and Abbreviations**

**Glossary**

* GUI (Graphical User Interface): The design of user interfaces based on specified requirements.
* Functional Testing: Verification that fundamental system functions operate correctly.
* Maintenance Testing: Examination of the functionality of a modified system following changes, updates, or alterations in the working environment.
* STP (System Test Plan): A comprehensive project planning document encompassing strategy, schedule, and topic tree.
* STD (System Test Design): Detailed documentation outlining the testing plan.
* STR (System Test Results): A concise document summarizing test results after three cycles.
* Traceability Matrix: A document that correlates any two baselined documents that require a many-to-many relationship to determine the completeness of the relationship.

**Abbreviations**

* QA: Quality Assurance
* CEO: Chief Executive Officer
* HR: Human Resources

**Testing Plan**

The testing team will communicate the requirements to the development team based on the planned tests. The development team will work according to these requirements to maximize efficiency.

**Resources:** Team leader, 4 testers. A total of 5 team members will be assigned to this project.

**Hardware Needs:**

1. **Computers:**

* High-performance desktops or laptops to run test scripts and perform manual testing.

1. **Network Equipment:**

* Routers and switches to simulate different network conditions for testing goodreads's performance under various network scenarios.

1. **Mobile Devices:**

* Various smartphones and tablets to test goodreads's mobile app across different platforms (iOS, Android).

1. **Webcams and Microphones:**

* Testing features like video uploads, live streaming, and video conferencing may require webcams and microphones.

1. **Virtual Machines:**

* Set up virtual machines for testing on different operating systems and browser combinations.

1. **Storage Devices:**

* Sufficient storage space to store test data, logs, and video files generated during testing.

**Software Needed:**

1. **Operating Systems:**
   * Install and configure various operating systems for testing, including Windows, macOS, and Linux distributions.
2. **Browsers:**
   * Latest versions of popular browsers (Google Chrome, Microsoft Edge, Safari) for cross-browser compatibility testing.
3. **Mobile Emulators/Simulators:**
   * Emulators or simulators to test goodreads's mobile app on different devices and screen sizes.
4. **Performance Testing Tools:**
   * Tools like Apache JMeter, LoadRunner, or Gatling for performance and load testing to simulate high user traffic.
5. **Automation Testing Tools:**
   * Selenium, Appium, or similar tools for automating functional tests across web and mobile platforms.
6. **Database Management System:**
   * Database systems (MySQL, PostgreSQL) for testing goodreads's data handling and retrieval functionality.
7. **Video Editing Software:**
   * Software for editing and processing videos generated during testing, especially for features like video uploads and streaming.
8. **Collaboration Tools:**
   * Communication and collaboration tools (e.g., Slack, Microsoft Teams) for effective communication among the testing team.
9. **Test Management Tools:**
   * Test case management tools (e.g., **TestRail, Jira**) to organize, execute, and track test cases.

This document will be approved by the testing team leader and the project manager. Following approval, the senior tester will build the STD document based on it. The STD document will then undergo approval by the testing team leader.

After approval of the STD document, three rounds of testing will be conducted. At the end of these rounds, the STR document will be prepared by the senior tester, undergo approval by the testing team leader, and serve as the final documentation.

Before the start of testing rounds, **functional tests** will be performed, including:

1. **Unit Testing:** To test individual units or components of a software application.
2. **Sanity Testing:** To verify that the most important functionalities of a software application work correctly.
3. **Integration Testing:** To verify the interactions and interfaces between different components or systems within the application.
4. **Regression Testing:** To ensure that new code or changes do not affect the existing functionality of the software.
5. **API Testing:** To validate the functionality of an API by testing its endpoints and request-response mechanisms.
6. **UI Testing:** To validate that the user interface elements and interactions function correctly according to the design.
7. **End-to-End Testing:** To evaluate the entire software system's functionality from start to finish, simulating real user scenarios and interactions.

Afterwards, the following **non-functional tests** will be conducted including:

1. **Performance Tests (Load + Stress + Volume):** they assess how well a system performs under various conditions, including heavy loads, stressful situations, and large data volumes.
2. **Security Tests:** Security tests aim to identify vulnerabilities and weaknesses in a system to ensure protection against unauthorized access.
3. **Upgrade and Installation Test:** Upgrade and installation tests verify the smooth installation of software upgrades and updates, ensuring that the system remains stable and functional.
4. **Recovery Tests:** they assess how well a system can recover from failures including data loss or system crashes.
5. **Localization and Globalization Testing:** Localization testing verifies that a software application adapts to specific regional or cultural requirements, while globalization testing ensures its compatibility with diverse international settings.
6. **Usability Testing:** evaluates the user friendliness and overall user experience of a software application to ensure it meets user expectations.
7. **Compatibility Testing:** Compatibility testing ensures that a software application works seamlessly across different devices, browsers, operating systems.

**Starting and exiting Criteria**

* **Criteria for starting the tests:**
* 100% of the planned sanity tests were carried out and passed successfully.
* 100% of planned functional and non-functional test cases have been created and reviewed.
* A traceability matrix is established, linking each test case to specific requirements.
* The testing environment, including necessary configurations, data, and tools, is prepared and verified.
* Sufficient and accurate test data for both positive and negative scenarios is available.
* The test plan, detailing the testing approach, objectives, and schedules, has been reviewed and approved.
* **Completion/Release Criteria:**
* 100% of planned functional and non-functional tests have been executed, and results have been documented.
* 75% of test cases passed successfully.
* All critical bugs have been fixed at this point.
* The remaining bugs are at low severity levels, with no high-severity issues affecting functionality.

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case ID** | **Functional Requirement** | **Test Case ID** | **Business Requirement** |
| 1.a | Search a book | 1 | Searching |
| 1.b | Search an author |
| 1.c | Search a friend |
| 1.d | Search a group |
| 2.a | Post a comment on a post | 2 | Comments |
| 2.b | Reply to a comment |
| 2.c | Like a comment |
| 2.d | Dislike a comment |
| 2.e | Edit a comment |
|  |
| 2.f | Delete a comment |
| 3.a | Add friend/add author | 3 | Add friend |
| 4.a | sign in via your email | 4 | Sign-In |
| 4.b | sign in via amazon account |
|  |
| 5.a | sign up via your email | 5 | Sign-Up |
| 5.b | sign up via amazon account |
| 6.a | Join group | 6 | Groups |
| 6.b | Leave group |
| 6.c | Create Post in group |

**Traceability Table**

**Test Tree**

**Functional tests:**

**1.login test:**

**i.**user has a valid username and password.

**ii.** user has a valid username and an invalid password.

**Iii.** user has an invalid username and a valid password.

**Iv.** Test the login functionality with empty credentials.

**2.search test:**

**i.** Have access to Goodreads website.

**ii**. Search with valid content

**iii.**Search with Invalid/Non-existent content

**iv.** Search with Filters

**3.add book to "want to read" list:**

**i.** User is logged in to Goodreads.

**ii.** User is not logged in to Goodreads.

**iii.** User is logged in and has already added a specific book to the "Want to Read" list.

**iv.** User added successfully a book to the "Want to Read" list.

**4.remove book to "want to read" list:**

**i.** User is logged in, and the book is in the "Want to Read" list.

**ii.** User is logged in, and the book is not in the "Want to Read" list.

**iii.** user is not logged in

**5.join group test:**

**i.** User is logged in and not a member of the group.

**Ii.** User is logged in and already a member of the group.

**iii.** User is not logged in

**6.Post a New Discussion Topic test**

**i.** User is logged in and created Valid Post Creation Test

**ii.** User is logged in and created Enter invalid data or leave required fields empty and attempt to submit.

**iii.** User is logged in and Entered text exceeding the character limits in the fields and submit

**7.follow review test**

i. User is logged in,Navigate to a reviewer's profile, click the "Follow Reviews" button

ii.User is already following a reviewer.

iii. User is logged in , Attempt to follow a non-existent or deleted reviewer.

iv. User is not logged in.

**8.manage notification test**

**i.** User is logged in, Changes are saved, and confirmation is displayed.

**ii.** User is not logged in, Attempt to access notification settings.

iii. User is logged in, Attempt to save invalid settings

**9.Ask author test:**

i. user is logged in , entered a valid author name .

ii. user is logged in , entered an invalid author name.

iii. user is not logged in , enter a valid author name

**10.Sign up test:**

i.valid username and password

ii. valid username invalid password

iii. invalid username

iv. valid details that already exists

**Hazard Table**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Hazard** | **Chance** | **Damage** | **Risk Level** | **Hazard Description** | **Action** | **Description** | **Responsible** |
|  |  | The probability of the hazard occurring, ranging from 0 to 1. | 1-10 | Chance  Multiplied by  Damage | What will happen in case of the hazard | Enclose  Monitoring  Acceptance | -Description  Of prevention method |  |
| **1** | Bad Internet Connectivity | 0.5 | 10 | 5 | Unable to connect as a user | Monitoring | NA | System |
| **2** | New Testers | 0.2 | 8 | 1.6 | Bad testing and coverage | Enclose | Finding a tester for the project length |  |
| **3** | Server Crash | 0.5 | 7 | 7 | Unable to login and retrieve info from the DB | Monitoring |  | System |
| **4** | Vacations | 1.0 | 7 | 7 | Vacations | Enclose | Postponing / finding replacement |  |
| **5** | Weak Server | 0.5 | 10 | 5 | System Crash | Enclose | Adding servers | System |
| **6** | Employee quitting | 0.5 | 10 | 5 | Lowering Team Morale | Monitoring | Hiring a stable worker | HR |
| **7** | Inexperienced Testers | 0.1 | 10 | 1 | Failure to meet the schedule | Enclose | Hiring Experienced Testers | QA Lead |
| **8** | Contract Termination | 0.3 | 10 | 3 | No income for the company | Monitoring | More flexible customer | CEO |
| **9** | Failure to meet the schedule | 1 | 10 | 10 | Unsatisfied Customer | Enclose | QA Lead bad Management | CEO |
| **10** | Customer requirements document changes frequently during the project | 0.5 | 7 | 3.5 | Failure to be prepared for changes by the customer will not ensure a professional, accurate and correct inspection | Monitoring | An appointment must be made with the customer and it should be noted to him that it will not be possible to make changes after the system is established | CEO |