

Testing Project for TripAdvisor's Account Module

ITFactory – Corfu Claudia Ioana

TABLE OF CONTENTS

1.0 Introduction

2.0 Objectives

3.0 Scope

3.1 In-scope items

3.2 Out-of-scope items

4.0 Testing Strategy

4.1 Entry and Exit criteria

4.2 Unit testing

4.3 Component integration testing

4.4 System testing

4.5 System integration testing

4.6 Acceptance testing

5.0 Hardware Requirements

6.0 Environment Requirements

7.0 Risks

8.0 Test Schedule

9.0 Approvals

Revision History

Date	Description	Author	Comments
08.03.2024	Test Plan for version 1.0	Corfu Claudia Ioana	Version 1.0

Roles and Responsibilities

Role	Responsibilities
Project manager Tapalaga Ioana	<ul style="list-style-type: none">• Overall responsibility for project planning, including scheduling and resource allocation for testing activities.• Collaborates with product owner to define scope, objectives and project deliverables related to testing.• Ensure the test plan is aligned with project goals and timelines.• Coordinate communication between team members, stakeholders and other relevant parties.• Track progress against the test plan and adjust as necessary to meet project milestones.• Manage any risks or issues related to testing activities and escalate as necessary.
Product owner Vasiliu Madalina	<ul style="list-style-type: none">• Define acceptance criteria for features under development and make sure they are included in the test plan.• Provide input on priority areas for testing based on business requirements and user needs.• Review and approve the test plan to ensure that it adequately covers the functionality and features of the TripAdvisor app.

	<ul style="list-style-type: none"> • Collaborate with the project manager and QA engineer to prioritize testing efforts based on user stories or feature importance. • Participate in test case reviews and provide feedback to ensure alignment with intended functionality.
Software developer Preda Roxana	<ul style="list-style-type: none"> • Develop high-quality code that adheres to coding standards and best practices to facilitate easier testing. • Participate in the creation and review of test cases to ensure full coverage of code changes. • Correct any defects or problems identified during testing in a timely manner. • Provide assistance to the QA engineer in troubleshooting and resolving any technical issues encountered during testing. • Work with QA engineer to automate testing where possible to increase efficiency and reliability.
QA Engineer Corfu Claudia Ioana	<ul style="list-style-type: none"> • Develop the Test Plan document that describes the testing approach, scope, and required resources. • Create detailed test cases based on requirements, user stories and acceptance criteria. • Run test cases manually or using automated testing tools to validate the functionality of the TripAdvisor app. • Document and report any defects found during testing, including reproduction steps and severity ratings. • Work with the development team to ensure timely resolution of defects and retesting of fixes. • Monitor test coverage and report testing progress to stakeholders, including any risks or issues affecting the testing schedule. • Continually improve testing processes and methodologies to improve the quality of the TripAdvisor app.

1.0 Introduction

In a fast-developing environment, user experience is increasing fundamentally. For TripAdvisor, a platform for booking and travel, having a flowless website is critical. The account module gives huge freedom and choices to the users, providing crucial information (as they can see reviews, compare two different locations in terms of prices, service and much more) and essential features for a personalized experience. However, since the customers want the perfect website in order to stay loyal to it, even a small bug or a functionality error may damage the credibility of the product.

This test plan presents a comprehensive approach to testing various aspects of the account module, using user-centric methodologies to make significant improvements.

2.0 Objectives

The primary objective of this testing is to optimize the TripAdvisor account module to ensure that the system meets all requirements, including quality requirements (functional and non-functional requirements) and fit indicators for each quality requirement and satisfies the use case scenarios and maintains product quality. The secondary objectives of the testing will be to identify and expose any issues and associated risks, communicate all known issues to the project team and ensure that all issues are properly addressed.

The main issues are:

- identify weaknesses within the existing account module.
- gathering useful information to implement function improvements.
- assess usability through specific test scenarios.
- facilitating account management processes to increase user engagement and retention.
- improve account security and privacy measures to grow user confidence.

3.0 Scope

To achieve these objectives, we will execute combined qualitative and quantitative methodologies, depending on the time and resources available.

3.1 In-Scope Items:

- a. Website functionalities
- b. User registration and login processes
- c. Localization and internationalization testing (multiple languages and regions)
- d. Search functionality for hotels, restaurants, attractions, etc.
- e. Review submission and moderation processes
- f. Booking process for hotels, flights, and restaurants (if applicable)
- g. Integration with third-party services (e.g., Google Maps)
- h. Performance testing (response times, loading times, etc.)
- i. Compatibility testing across different browsers
- j. Security testing (data protection, encryption, etc.)

3.2 Out-of-Scope Items:

- a. Third-party services not directly related to TripAdvisor's core functionalities
- b. Backend infrastructure testing (assumed to be covered by the development team)
- c. Testing of features not publicly accessible or intended for internal use only
- d. Mobile application functionalities (iOS and Android)
- e. Accessibility testing (compliance with WCAG standards)

4.0 Testing Strategy

The account module in TripAdvisor is crucial for users to create, manage and maintain their accounts on the platform. We'll verify that all features and functionalities of the TripAdvisor Account Module work as expected, meeting the specified requirements and ensuring a seamless user experience.

4.1 Entry and Exit criteria

Entry Criteria

- Availability of the test environment with the latest version of TripAdvisor.

- Completion of initial system integration testing to ensure basic functionality.
- Availability of test data, including examples of reviews, ratings and user profiles.
- Test environment set up to simulate various scenarios and usage environments.

Exit Criteria

- All critical defects identified during testing are addressed and verified.
- Performance benchmarks meet predefined thresholds for response time and resource utilization.
- Security vulnerabilities identified during testing are mitigated or documented with a resolution plan.
- Identified usability issues are addressed or prioritized for future improvements.
- Test documentation, including test cases, test results and any deviations are reviewed and finalized.
- Sign-off by stakeholders indicating readiness for production deployment.

4.2 Unit testing:

- Develop unit tests for each module or function in the system.
- Test cases should cover both positive and negative scenarios, including boundary conditions.

Areas of interest:

- Basic algorithms for search functionality.
- Data validation and processing.
- User authentication and authorization modules.

4.3 Component integration testing:

- Gradual integration of tested units/components to form larger subsystems.
- Develop integration test cases to validate communication and data flow between components.

Areas of interest:

- Integration between user interface components and backend services.
- Interactions between booking and payment systems.

4.4 System testing:

- Test functionality related to user registration, search, booking and submission of reviews.
- Validate system performance, usability, security and compatibility.

Areas of interest:

- Cross-browser compatibility.
- Performance under different network loads and conditions.

4.5 System integration testing:

- Execute test cases covering scenarios involving multiple systems interacting with each other.
- Verify compatibility and consistency between integrated systems.

Areas of interest:

Interaction between TripAdvisor's internal systems and external service providers (e.g. payment gateways, hotel booking APIs).

4.6 Acceptance testing:

- Involve real users to validate system functionality, usability and performance.
- Obtain feedback from stakeholders and users to make necessary adjustments.

Areas of interest:

- Usability issues, including navigation and interface design.
- Performance in realistic usage scenarios.

5.0 Hardware Requirements

- Desktop computer/laptop with at least 4 GB RAM and 128 GB storage capacities
- Network infrastructure: at least 3G technology and/or 25 mbps speed

6.0 Environment Requirements

- Operating system: Windows 10 or higher
- Browsers (latest versions): Google Chrome, Mozilla Firefox and Opera

- Internationalization: test various languages (English, Italian, Romanian)
- User Environments: test with different user profiles including new users, returning users, and users with varying activity levels.

7.0 Risks

- Third-Party Integration Risks: TripAdvisor relies on various third-party services, such as payment gateways, mapping services and social media platforms. Any problems or changes to these integrations could affect the functionality of TripAdvisor.

- Network Dependency: Since TripAdvisor is an online platform, it is vulnerable to network issues. Testing under different network conditions is essential to identify potential performance bottlenecks.

- Security Vulnerabilities: With a large user base, TripAdvisor is a potential target for security breaches. Risks include data breaches, unauthorized access to user accounts, and manipulation of user-generated content. Thorough security testing is crucial to mitigating these risks.

- Platform Updates: Updates to operating systems, web browsers and mobile devices may affect the compatibility and performance of TripAdvisor. Ensuring compatibility with the latest software and device versions is necessary to maintain a smooth user experience.

- Scalability Challenges: As the user base grows, TripAdvisor needs to expand its infrastructure to handle increased traffic and demand. Failure to anticipate scalability requirements can lead to performance issues and downtime during peak periods.

8.0 Test Schedule

- **Day 1-2** Test Preparation: define test objectives and scope, set up testing environments and create test cases.
- **Day 3-5** Test Execution: conduct functional testing and execute performance testing.
- **Day 6-7** Regression Testing: execute regression test suites and validate bug fixes.
- **Day 8-9** Test Reporting: compile test results and prepare test summary reports.
- **Day 10** Retesting and Closure: retest fixed defects. final verification and sign-off and test closure and documentation.

9.0 Approvals

	Project manager	Qa Lead
Name		
Signature		