Testing Strategy

Skincare & Beauty Consultancy Platform
Group 4

Spring 2025

1 Objectives

The aim of the test strategy is to guarantee that every feature of the Skincare & Beauty Consultancy Platform works properly, is secure, and offers users a smooth experience.

2 Test Types

- Unit Testing: Verify that each component (such as the expert matching algorithm and payment processing) functions as intended.
- Integration Testing: Confirm that the integration of various subsystems is functioning correctly (e.g., frontend interaction with the backend, linking of payment gateway).
- System Testing: Comprehensive testing of the complete system from start to finish to verify that all functionalities integrate smoothly.
- User Acceptance Testing (UAT): Confirm that the platform fulfills user requirements and operates as anticipated from a user's viewpoint.
- Performance Testing: Verify that the platform can manage high traffic and scale as needed (e.g., multiple users arranging consultations).
- Security Testing: Assess for weaknesses, encompassing data privacy and safeguarding strategies like SSL encryption, two-step verification, and user session oversight.

3 Test Environment

- Browsers: Chrome, Firefox, Safari, and Edge for compatibility.
- Endgeräte: Desktop für responsives Design.
- Payment Gateway: Google Pay, Apple Pay, Credit/Debit Cards (integration with test accounts).

3.1 Test Phases

- Phase 1 Requirement Testing (Plan-Driven): Verify that both functional and non-functional requirements are satisfied.
- Phase 2 Integration Testing (Iterative): Ensure that system components work together seamlessly.
- Phase 3 System Testing (Plan-Driven): Evaluate the entire platform using scenarios from actual practice.
- Phase 4 User Acceptance Testing (Iterative): Engage end-users to confirm usability and the overall experience.
- Phase 5 Security Testing (Iterative): Conduct meticulous examinations for data security and vulnerabilities.

3.2 Time Frame of Testing

The time frame for testing should be structured as follows:

- Unit Testing: 1 week
- Integration Testing: 2 weeks
- System Testing: 3 weeks
- UAT: 2 weeks
- Security Testing: 1 week

The testing process may overlap based on available resources and feedback.

3.3 Who Will Test

- Unit Testing: Developers (Test the individual modules and components).
- Integration Testing: Developers and QA team (Ensure the subsystems work together).
- System Testing: QA team (End-to-end system testing).
- UAT: End-users (Validate the user requirements and experience).
- Security Testing: Security experts (Conduct vulnerability assessments and penetration testing).

3.4 Roles

- Project Manager: Ensures testing progresses according to the schedule.
- Testers (QA Team): Responsible for functional and system testing.
- Security Experts: Focus on security testing and threat modeling.
- Developers: Execute unit and integration tests.