

# **Test Plan for project “Online lessons platform”**

**Version:** 1.0

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## **1. Introduction:**

This document serves as a test plan for the "Online lessons platform" project (version 1.0). It defines what we plan to test, what we don't, the team's needs for successful testing, quality acceptance criteria, planned testing techniques and approaches, risks, responsible parties, and approval procedures.

## **2. Functional Requirements:**

- 2.1 Register New User
- 2.2 User Login
- 2.3 Create New Course (Registered User)
- 2.4 Edit Course (Registered User) (Own Course Only)
- 2.5 Delete Course (Registered User) (Own Course Only)
- 2.6 Add Available Courses to Cart (Registered User)
- 2.7 View Available Courses (All Users)
- 2.8 Delete Account
- 2.9 Functional Navigation (Menu and Interface)

## **3. Testing Scope:**

- 3.1 Launch Application
- 3.2 Registration Ability
- 3.3 Authorization
- 3.4 Ability to Create Course (Registered User)
  - 3.4.1 Adding Course Details
  - 3.4.2 Uploading Course Materials
  - 3.5 Ability to Edit Course (Registered User) (Own Course Only)

- 3.6 Ability to Delete Course (Registered User) (Own Course Only)
- 3.7 Ability to Add Available Courses to Cart (Registered User)
- 3.8 Ability to View Course Details (All Users)
- 3.9 Ability to View Available Course Lessons (Registered User)
- 3.10 Clickability of Links and Buttons
- 3.11 Close Application
- 3.12 Response Time, Data Processing Speed
- 3.14 Inability to Delete/Edit Another User's Course/Lesson
- 3.15 Authentication and Authorization Testing, Incorrect Configuration
- 3.16 Usability Testing
- 3.17 Ensure Application Works on Different Operating Systems and Browsers

## **4. Testing Types:**

### ***4.1 Functional Testing:***

**Testing Objective:** To check the functionality of all main features:

- User Registration
- Login/Logout Functionality
- Add New Courses
- View Existing Courses/Lessons
- Edit/Delete Courses
- Add Courses to Cart

**Testing Methodology:**

- Boundary value analysis
- Equivalent class testing
- Decision table testing
- State transition testing
- Pairwise testing

**Testing Completion Criteria:** Expected results with correct data, error handling with incorrect data.

**Special Conditions:** Completion of all planned tests, resolution of identified defects.

### ***4.2 User Interface Testing:***

**Testing Objective:** To ensure the correctness of the user interface display, its usability, and compliance with standards.

**Testing Methodology:**

- Visual analysis
- Interaction with interface elements

**Testing Completion Criteria:** Proper display of elements, correct functioning of buttons, forms, and menus.

**Special Conditions:** Ensuring consistency across different platforms.

#### ***4.3 Usability Testing:***

**Testing Objective:** To evaluate the overall usability of the application, including navigation, task performance, and user goal achievement.

**Testing Methodology:** Manual Testing

**Testing Completion Criteria:** Users can perform tasks intuitively and efficiently, navigation is straightforward, positive user experience is noted.

**Special Conditions:** Identification of common issues for improvement.

#### ***4.4 Regression Testing:***

**Testing Objective:** To ensure that new changes have not affected existing functionality.

**Testing Methodology:**

- Retesting of fixed bugs
- Automated regression testing

**Testing Completion Criteria:** Existing functions remain functional, no new defects introduced.

**Special Conditions:** Priority testing of critical areas and frequently used functionalities.

#### ***4.5 Security Testing:***

**Testing Objective:** To identify and eliminate vulnerabilities to protect user data and ensure system integrity.

**Testing Methodology:** Authentication testing.

**Testing Completion Criteria:** Absence of critical vulnerabilities, correct authentication and access control.

**Special Conditions:** Regular security updates, compliance with standards and regulations.

#### ***4.5 Compatibility Testing:***

**Testing Objective:** To evaluate system performance under different conditions to ensure responsiveness and stability.

Testing Methodology: Performance testing

Testing Completion Criteria: Acceptable system response time, stability with prolonged use.

Special Conditions: Consideration of various platforms.

### **5. Area Not to Be Tested:**

5.1 Ability to Purchase Courses

5.2 Mobile and Tablet Versions

### **6. Testing Environment:**

6.1 Operating Systems: Windows 10, 11

6.2 Browsers: Google Chrome, Mozilla Firefox

6.3 Devices: Computers, Laptops

### **7. Testing Plan:**

7.1 Test Environment and Data Preparation

7.2 Test Scenario Execution

7.3 Tracking and Recording Detected Defects

7.4 Testing Report Preparation

### **8. Testing Completion Criteria:**

- 8.1 Successful Completion of All Test Scenarios
- 8.2 No Remaining Defects with Priority ("Highest", "High", "Medium")
- 8.3 No More than Two Defects with Priority ("Low", "Lowest") Left Unresolved
- 8.4 Each Element Tested in at Least Two

## 9. Testing Stop Criteria:

- 9.1 Identification of critical defects that impede test execution.
- 9.2 Lack of access to necessary testing environments and data.
- 9.3 Changes in requirements.

## 10. Risks:

- 10.1 Insufficient coverage of key usage scenarios by tests.
- 10.2 Unpredictable aspects of integration with external services.
- 10.3 Deadlines (until 10.04.2024).

## 11. Test Results:

- 11.1 Comprehensive testing report with metrics on the priorities of detected and fixed defects.
- 11.2 Detailed checklists reflecting the tested functionality, testing methods, and used environments.
- 11.3 A complete list of found and retested defects will be presented in the Bug Tracking System.

## 12. Schedule

Стадия:	Дата:
Requirements Analysis	21 мар. 2024 г.
Test Design	26 мар. 2024 г.
First Test Session	3 апр. 2024 г.

Стадия:	Дата:
Regression Testing	5 апр. 2024 г.
Acceptance Testing	8 апр. 2024 г.
Reports and Project Delivery	10 апр. 2024 г.

### 13. Testing Tools and Software:

Development environment	IntelliJ IDEA
Build system	Gradle
Framework for testing	TestNG
Driver for testing system	Selenium
Version control system	GitHub
Continuous Integration Server	Jenkins
For documentation	Google doc and google spreadsheets
For diagrams	Mindmup
Test management	TestLink, Jira

### 14. Test documentation:

Document (and version / date)	Created or Available	Received or Reviewed	Author or Resource	Notes and link
Requirements Specification	yes	yes	Valentyna Babaian	<a href="#">Link</a>
Functional Specification	yes	no	Aliia Sagutdinova	Link
Design Specifications	yes	no	Aliia Sagutdinova	Link

### 15. Responsible:

Test plan	Valentyna Babaian
Check list	
Test cases	
Automation test	
Bug creation	
Bug reports	

## 16. Approvals

Role	Name , Signature	
QA	Aliia Sagutdinova	Not reviewed ▾
Developer	Stepan Nesterenko	Not reviewed ▾
Developer	Knestiapin Egor	Not reviewed ▾