

Test Environment Document

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1. Introduction

The test environment ensures that all functionalities of the Academy LMS Plugin are validated under conditions simulating real-world usage. It includes the hardware, software, network configurations, and tools required to execute tests effectively.

2. Environment Details

2.1 Operating Systems

- **Windows 11:** For desktop and laptop testing with popular browsers.
- **macOS:** For compatibility testing using Safari.
- **Android:** To verify functionality on mobile devices using Chrome.
- **iOS:** To ensure proper functionality and rendering on iPhones with Safari.

2.2 Browsers

- **Google Chrome (latest version):** As the most widely used browser.
- **Mozilla Firefox (latest version):** To ensure compatibility with open-source browser environments.
- **Microsoft Edge:** Testing for compatibility on Windows devices.
- **Safari (latest version):** To validate performance and compatibility on Apple devices.

2.3 Server Environment

- **WordPress CMS:** Installed and configured with PHP version compatible with the plugin.
- **Database:** MySQL configured for plugin data management and retrieval.

2.4 Devices

- **Desktop/Laptop:** For thorough testing of all functionalities.
- **Tablets:** To check responsiveness and ease of use.
- **Mobile Devices:** Android and iOS for mobile-specific functionality and UI testing.

2.5 Network Configuration

- Stable internet with a bandwidth of at least 10 Mbps for optimal plugin usage and performance testing.

3. Test Tools and Utilities

| Tool | Purpose |
|-----------------------|---|
| Jira | Bug tracking and reporting. |
| JMeter | Performance testing under different loads. |
| BrowserStack | Cross-browser compatibility testing. |
| Lightshot | Capturing screenshots for defect reporting. |
| Selenium | Automating repetitive test cases (ongoing). |
| Excel and Jira Zephyr | Test case management. |

4. Configuration Requirements

4.1 Hardware Requirements

- **Desktops/Laptops:** Minimum configuration - 8 GB RAM, 2 GHz multi-core processor, and 256 GB storage.
- **Mobile Devices:** Android (version 8 or above), iPhone (iOS 13 or above).

4.2 Software Requirements

- **WordPress Platform:** Latest version installed with Academy LMS Plugin.
- **Web Servers:** Apache/Nginx with PHP configuration for testing server-side functionality.

5. Responsibilities

- **QA Engineers:** Set up, maintain, and monitor the testing environment.
- **Developers:** Provide support for debugging and fixing issues in the environment.
- **Test Manager:** Ensure that the environment is properly configured and ready for testing.

6. Data Requirements

- Dummy user accounts for registration and role-based testing (e.g., admin, instructor, student).
- Sample course materials such as videos, quizzes, and documents.
- Test payment credentials for simulating transactions.