# Test Plan for xaltsocnportal Application

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## 1. Introduction

This document outlines a comprehensive test plan for the xaltsocnportal application, a CRUD web application that allows users to create requests to add nodes to existing blockchains or initiate requests to create new private blockchains.

## 2. Scope

### In Scope:

- End-to-end testing of user account management (Sign Up, Sign In, Sign Out).

- Testing request submission for onboarding nodes to existing blockchains and creating private blockchains.

- Form validations, error handling, and UI/UX consistency.

### Out of Scope:

- Extensive performance/stress testing.

- Detailed security penetration testing.

## 3. Test Types

- Functional Testing: Verifies that each feature works according to requirements.

- UI/UX Testing: Ensures interface consistency and usability.

- Boundary Testing: Tests input limits and validations.

- Security Testing: Identifies security vulnerabilities.

- Performance Testing: Evaluates response times under load.

## 4. Test Environment

Operating Systems: Windows 10/11, macOS, Ubuntu

Browsers: Google Chrome, Mozilla Firefox, Microsoft Edge, Safari

## 5. Test Approach

- Manual Testing: Exploratory and structured testing of major workflows.

- Automated Testing: Selenium WebDriver with Page Object Model for regression tests.

## 6. Entry and Exit Criteria

### Entry Criteria:

- Application is deployed and accessible.

- Test cases and test data are prepared and reviewed.

### Exit Criteria:

- All planned test cases have been executed.

- No critical or high-severity defects remain open.

## 7. Defect Management

- Defects will be logged in GitHub Issues.

- Each defect report includes description, steps to reproduce, expected vs. actual result, and screenshots.

## 8. Test Deliverables

- Test Plan Document (this document)

- Manual Test Cases Document

- Automated Test Scripts (Selenium/Cucumber)

- Test Execution Reports

- Defect Reports