Conduit Test plan

Introduction

The “Conduit” application is designed as an open-source application to train software development and testing skills. The main website functionality includes registration and sign-in, posting articles on different topics, reading articles, the ability to like an article, posting a comment, and following users.
The Test Plan is designed to prescribe the scope, approach, resources, and schedule of all testing activities of the “Conduit” website.
The plan identifies the features to be tested, the types of testing to be performed, the resources and schedule required to complete testing and the risks associated with the plan.

1. Test strategy

1.1 Testing scope

1.1.1 Features to be tested

Module name	Login type	Description
Conduit logo	Logged in Logged out	The logo is located in the left corner of the screen for logged-in and logged-out users; it should not change when switching to another page.
Home	Logged in Logged out	**Logged in**: On this page, the user can find the list of his published articles and global articles. Articles are sorted from newest to oldest. One page contains 10 newest articles. **Logged out:** On this page, the user can see the header with the application name and short description. The user can find the list of global articles. Articles are sorted from newest to oldest. One page contains 10 newest articles.

		The logged-in and logged-out user can see popular tags on the right side of the screen.
Sign in	Logged out	The logged-out user can sign in to the application by filling out the ‘Sign in’ form on this page. The form should consist of 2 required fields: Username and Password and the [Sign in] button. The not-signed-in user can use the link to redirect to the sign-up page.
Sign up	Logged out	The logged-out user can sign up for the application by filling out the ‘Sign up’ form on this page. The form should consist of 3 required fields: Username, Email, and Password and the [Sign up] button. The signed-up user can use the link to redirect to the sign-in page.
New Article	Logged in	The logged-in user can create a new article in the New Article form. The user should be able to add a title, a little description, an article, tags, and publish an article.
Settings	Logged in	The user should be able to change account information. The user can edit account details for an existing account, and add a picture or a short bio. A user should be able to log out from the account.
User account	Logged in	The user can see the account picture. The user can see a list of his published posts and favorite posts. Articles are sorted from newest to oldest. One page contains 10 newest articles.
Article page	Logged in Logged out	**The logged-in** user can see the ‘User profile link’, the date of publication, the title, description, and text of the article.

		The user should be able to delete and edit his article. Users can leave a comment on an article or add an article to Favorites. The logged-out user can see the ‘User profile link’, the date of publication, the title, description, and text of the article. The user can’t leave a comment on an article and delete or edit articles.

1.1.2 Out of test scope

These areas are out of scope for this testing cycle:

- Website Security
- Website Performance
- Website API testing
- Test Automation

1.2 Test types

In this testing cycle, the Conduit website will be tested using the following testing types:

- System testing: all the testing will be conducted on a complete, integrated system to evaluate the system's compliance with its specified requirements.
    - Exploratory testing.
    - Smoke testing for each new build.
    - Functional testing of all the features
    - GUI testing
    - Compatibility testing: test only Windows and MacOS browsers

1.3 Risks and Issues

Risk	Mitigation
Team members lack the required skills for website testing	Provide the team with a senior tester who has the necessary skills and will be able to train and optimize the work of the entire team in the shortest possible time.
Not enough time to test all browsers and OS.	Prioritize browsers and operating systems by popularity and test the most used ones.
Not enough time to execute all test	Start testing with the most critical scenarios

scenarios.	and use test design techniques to reduce the number of tests.
A member of the team has got sick	Allow time for emergencies at the planning stage. Find out the readiness of other team members to take on part of the work in unforeseen situations.

1.4 Test Logistics

1.4.1 Who will test?

The project should use outsourced members as the tester to save the project cost.

1.4.2 When will the testing occur?

The team will start the testing after:

- Software is available for testing;
- Test Specification is created;
- Test Environment is built;
- Enough human resource for testing;

2. Test objective

The test objectives are to verify the functionality and API of the Conduit app. The testing should be focused on the flow of publishing articles and sharing information between members. The main features are authorization, posting new articles, following members, saving favorite articles on their pages, adding likes, and writing comments. Testing should be done on preselected versions of browsers and mobile devices described in the "System resource" section.

3. Test criteria

3.1 Suspension criteria

- 10% of P0/P1 tests failed, which should lead to the testing suspension until the development team fixes all the corresponding bugs.
- 30% of P2/P3 tests failed, which should lead to the testing suspension until the development team fixes all the corresponding bugs.

3. 2 Exit criteria

The test execution will be stopped no later than the last day of the sprint. The exit criteria should be met to complete the testing cycle:

- The mandatory Execution rate is 95%.
- The mandatory Pass rate is 100% for P0/P1 tests.
- The mandatory Pass rate is 80% for P2/P3 tests.
- All necessary artifacts collected: test cases, and bug reports.
- The product should not have known bugs with severity Critical and Major and bugs with Priority High at the time of finishing testing.
- The list of allowed bugs is agreed upon with the developers and managers.

4. Resource planning

4.1 System resources

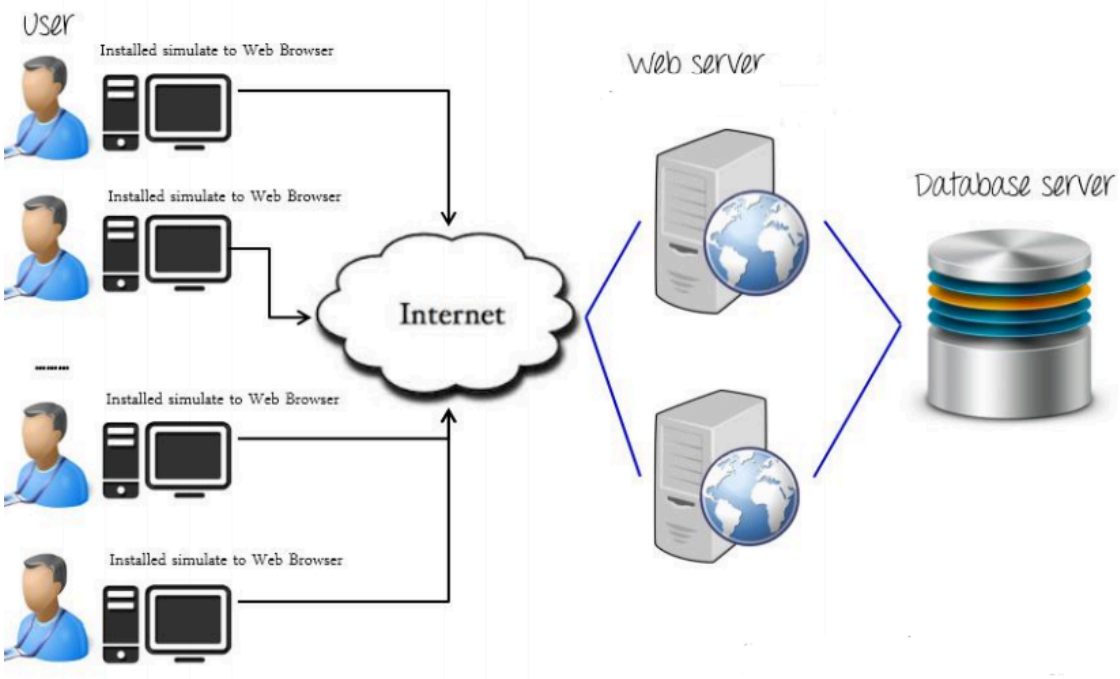
No.	Resources	Description
1	Browser	Chrome, Safari, Opera
2	Network	Setup a LAN Gigabit and 1 internet line with the speed at least 5 Mb/s
3	Computer	At least 3 computer run Windows 7, Ram 2GB, CPU 3.4GHZ At least 3 computer run MacOS 14, Ram 2GB, CPU3.46 GHZ

4.2 Human resources

No.	**Resources**	**Description of tasks**
1	QA members	• Identifying and describing appropriate test techniques/tools/automation architecture Verify and assess the Test Approach Execute the tests, Log results, Report the defects. Outsourced members
2	Mentors	• Review Test cases, builds up and ensures test environment and assets are managed and maintained Support QA members to use the test environment for test execution

5. Test environment

Testing should be conducted in the production environment. To run the app locally for working with DB we will use Docker.



6. Schedule & estimation

6.1 All project tasks and estimation

Task	Members	Estimate effort
Create Test plan	QA members	3 man-hour
Create decomposition, decision table, state transition diagram	QA members	10 man-hour
Create Test cases	QA members	50 man-hour
Review Test cases	Mentors	10 man-hour
Test cases execution	QA members	100 man-hour
Create Bug reports	QA members	30 man-hour
Writing test report	QA members	8 man-hours

6.2 Schedule to complete these tasks

Task	1-st Sprint	2-nd Sprint	3-rd Sprint
Create Test plan	☑		
Create decomposition, decision table, state transition diagram	☑		
Create Test cases		☑	
Review Test cases		☑	
Test cases execution			☑
Create Bug reports			☑
Writing and preparing test results			☑

7. Test deliverables

7.1 Before the testing phase

- Test plan
- Test cases
- Test design specifications

7.2 During the testing

- Test Scripts
- Simulators
- Test Data
- Requirements Traceability Matrix
- Error logs and execution logs

7.3 After the testing cycle is over

- Test results/reports
- Defect report
- Instalation
- Releaise notes