Thutong Site Learning Center Testing Policy

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1 Definition of Testing

1.1 Purpose

Testing serves as the basic measure of progress within the softaware development process. Therefore without testing software throughout the develpment cycle there is no form of progress which prove that developers have made an attempt to solving the problems specified by the customer or user.

Also, in situations where products need to ensure compliance with regulatory requirements, software testing can safeguard the organization from legal liabilities by verifying compliance. Such as protecting user data.

1.2 Goal

The main goal to testing is ensuring that Thutong LMS system software fulfills its requirements as stipulated in the systems requirement documentation. The requiements to be meet include both functional and nonfunctional requirements which might way down the performance, security or any other system qualities.

2 Description of the test process

Test-Driven Developement (TDD) would serve of as our testing machanism which would be applied throughout the development cycle to allow a continous testing. This in turn allows a better measure to the development progress.

1. Prepare for test driven development.

2. Write tests.

3. Implement and test the features.

4. Repeat until all the features are correctly implemented.

5. Accomplish test coverage.

3 Test Evaluation

Use Case-Based Testing serve as the testing objective throughout the testing phases of the systems life cycle.

Use Case-Based Testing serve as the testing objective throughout the testing phases of the systems life cycle. This allows the team to measure progress.

Table 1: UC1: Register a New User

Actor: New User	System: Web Application
User link	0. System displays homepage with a Register
1. User fills in the login ID (email or Facebook), password, retyped password, and Click Submit button	2. System displays a new User Registration Form with options. 2.1. Register via email 2.2. Register via Facebook
	3. System verifies the login ID and passwords, 3.1. Display the Registration Success page, or 3.2. Display an error massage and ask the user to try again.
4. User sees the Registration Successful page.	

Table 2: UC2: Login User

Actor: User	System: Web Application
	0. System displays homepage with a login User 0.1. Login via email 0.2. Login via Facebook
1. User fills in the login ID, password and Click Login button	2. System verifies the login ID and passwords 2.1. Display the Login Success page, or 2.2. Display an error massage and ask user to try again
3. The user sees the Login Successful page	

Table 3: UC3: Write Quiz

Actor: User	System: Web Application
0. User browse a coarse content topic	1. System displays a subtopic page with a Write Quiz button
1. User click the Quiz button	2. System Displays the quiz (and allow user interaction) with a submit or exit button.
3. The user write the quiz and submit	4. System marks the quiz and return, accumulated score.
5. User receives accumulated results	

Table 4: UC4: Write to Discussion Board

Actor: User	System: Web Application
0. User browse a coarse content topic	1. System displays a subtopic page with a write to discussion board button
2. User writes to discussion board and click submit button.	3. System verifies if user is logged in 3.1. Display the message sent message 3.2. Display error message, user must be login to write to board
4. The user see the message they had written to the discussion board	

Table 5: UC4: Adverts rendering

Actor: User	System: Web Application
0. User browse the web appication	1. System displays small pop-up adverts that are non destructing as a link
2. User clicks the link to the advert.	3. System redirects to the desired advertiser
4. Views advert source origin	

4 Quality Level to be achieved

4.1 Performance

- Able to load under weak network signal i.e. 2g network.

- Less data bandwidth required to load and browse.

4.2 Availability

- System functionalities must be up and available at all times 24 hours a day and 7 days a week. this includes the server, database and browser web interface.

- Aways accessable through web browser dispite the type of device be used. Whether desktop or mobile devices.

4.3 Usability

- The system must be efficient to use: takes less time to accomplish a particular task. This sould take less than a minute

- Easier to learn: operation can be learned by observing the object i.e. the names of different functionalities is intuitive.

- More satisfying to use: student users comfort in using the system for educational purposes i.e. the user friendly

5   Approach to Test Process Improvement

Travis CI is well enough tool to aid with the TDD. It Why travis CI?
Travis ci provides a syncing functionality to github. This allows the Team (Digital BlackSmiths) to use whats already in place without having to learn new optimizing tools which might make software testing a baden.