SBU's LEARNING PATHS TEST PLAN

There will be three major types of testing for our system. As we develop our product, the first type of testing we will get into is unit testing and module testing to make sure the code we write is accurate and functioning correctly. After that, our second type of testing will be integration testing to verify interaction between various software components and detect interface defects. Lastly, we will engage in user acceptance testing to see if the application is usable by outside users and to gain feedback for improvements.

Scope:

User account management

- Need to test controls that create a new profile, edit profile, and view profile by user.
- User can create a new profile and information will be saved into the database
- System retrieves the information from the database
- Profile can be successfully edited and personal information can change
- The user can view their own profile page

View learning paths

- Test public view without login, user view, category view ("my created paths" and "subscribed path")

Search pages (?)

- Test to see that the webcrawler is searching and grabbing for the content requested by the user in the search bar (We may not get into this)

Out of scope:

Search pages

- We are still discussing this with our client, but we think this is out of our scope

Test scenario prep:

- We are still in the design stages of our project and have yet to develop
- To prep for the test scenario we shall start developing first
- Once we start coding, we will start testing right away

Test documentation: test cases/test data/ setting up environment. Also, feedback from the users during acceptance testing and changes to be implemented

Test execution:

Testing will be carried out using 3 approaches: Unit Testing, System/Integration Testing, and Acceptance Testing. All members of the team will participate in all phases of testing. The only exception is Acceptance Testing, in which external users will be brought in to participate, while team members will still conduct the actual testing.

- Unit Testing

    - Unit Testing will be done by all members of the team. Each member is responsible for testing their specific developed parts. Crossover testing is also encouraged to ensure a more robust unit testing. The purpose of unit testing is to uncover any major bugs or defects that prevent all features of the system to function properly. All issues will be logged by 4 measures: severity, source, process of resolving, and time spent. All unit testing results will be given to the project manager, and then the client, for approval.
- System/Integration Testing
    - System/Integration Testing will also be carried out by all team members. This testing will ensure that all parts of the system work cohesively together. All data must flow correctly and accurately from input to output. The front-end display must reflect what is expected by the back-end processes.
- Acceptance Testing
    - Acceptance Testing will be carried out by team members, clients, and external users. This is done to ensure that the system adheres to all the user requirements and specifications outlined for the system itself. We will apply black box testing on the system to uncover any last minute defects that the user may run into. We will also assess the overall usability of the system in this phase. Acceptance testing will be completed

Change control:
All changes from testing will be committed to the team Github repository. Changes will be logged in the submission.log file in Github.