Software Engineering 300: Iteration 3 Report

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Updated User Stories

ID	Story	Estimation	Priority
1	As a user, I wish to be able to register for an account with a username and password		-----
2	As a user, I wish to be able to login to an existing account with a username and password		-----
3	As an authorized user, I wish to be able to view the list of available scholarships in the system		-----
4	As an authorized user, I want to be able to view the general profile of a specified scholarship		-----
5	As an authorized student, I want to be able to submit a scholarship application		-----
6	As an authorized student, I want to be able to view all personal scholarship application submissions		-----
7	As an authorized student, I want to be able to set a priority for scholarship applications		-----
8	As an authorized student, I want to be able to resume an in-progress application form if not complete		-----
9	As an administrator, I wish to be able to add (new) scholarships to the list of scholarships		-----
10	As an administrator, I wish to be able to remove existing scholarships		-----
11	As an administrator, I wish to be able to see all of the applicants for each respective scholarship		-----
12	As an administrator, I wish to be able to add or edit a scholarships eligible requirements		-----
13	As an administrator, I wish to be able to filter student applications based on application eligibility		-----
14	As an administrator, I wish to be able to process a scholarship application and grant or reject an application		-----
15	As an administrator, I wish to be able to filter the list of students based on specified criterias		-----
16	As an authorized user, I wish to be able to view my user profile that contains all of my personal information		-----
17	As an authorized user, I wish to be able to receive notifications when there is an update to an application		-----

18	As an authorized user, I wish to be able to filter scholarships based on criteria		-----
19	As an administrator, I wish to be able to create a scholarship with requirements		-----
20	As an authorized user, I wish to be able to view a tab that displays all unseen notifications for the user		-----

Test Suites

Type of Test	Class	Description
Automated	NotificationManager	Ensure that notifications and being properly linked to their user and is able to be retrieve between sessions
Automated	UserDatabase	Test to make sure that the user is properly added to the database and can be deserialized for use between sessions
Automated	StudentTest	Tests to ensure that all Student methods are grabbing correct data, and that Users are correctly labelled as Students. Checks to make sure student data is properly being saved and grabbed.
Automated	ScholarshipTest	Tests that scholarship applications, edits, submissions, applicants and accepting/rejecting scholarships are properly saved and pulled from the database. Ensure that the searching and sorting of scholarships is correct.
Automated	AdminTest	Tests check to ensure that

		admin related methods and functions are functioning properly, and that users that are specified as Admins can access these specific methods. Ensure that admin functions properly modify and interact with the student and scholarship manager, and ensure that only admin has access to specific scholarship accept and reject methods.
Automated	LoginTest	Tested login functionality

- How did you perform testing activities including the test cases?

Some processes that we had done included testing bounds for the inputs that are facing the user, and testing whether proper authorization is required before a function is called.

- Which testing techniques did you follow?

We have included some automated testing in our software suite using JUnit unit testing. We separated the tests by module in the software, and test the expected and actual values that each method returns. By using the "Assert" variations offered by JUnit, we can test boolean outputs and exact outputs expected by each function.

For the GUI, it is more challenging to test due to no automated testing being available for UI's. As such, we needed to do manual testing to test the inputs on every text field possible in the software to ensure that outputs are being processed properly, and so that invalid outputs are rejected properly.

- Have you done code inspection for all the classes or partial classes?

An informal code inspection has been completed on the backend code to ensure that no errors would propagate to the UI. After the logic of the backend was completed, we inspected for any possible errors in the input handling on the UI. We analyzed whether the edge cases were covered or any particularly hard cases needed to be handled, and implemented changes based on the analysis of the code.