The testers in our group are Gina and Yi, so we will be completing the test together.

This is our updated testing plan for 4.30.2020

This document is organized by class, then broken down into further unit tests for individual methods in the class.

testLogin - Once the individual unit tests have been completed for this class, the testers will perform a **Black Box** test by acting as a user/admin trying to login to the system. This test will ensure that the proper flow of events occurs from the user’s point of view.

* testUserLogin **- Grey Box**
* testAdminLogin **- Grey Box**

The individual unit tests are considered Grey Box tests because the tester will be looking for the proper functionality as well as looking into the details of the code to make sure everything is working as it should

testUser - A **Black Box** test will be conducted after all unit tests pass so that the testers can ensure the class will function properly for the users.

* testAddBook **- Grey Box**
* testRemoveBook **- Grey Box**
* testRateBook **- Grey Box**
* testAddComment **- Grey Box**

The unit tests for each method in the User class will be Grey Box tests because the tester will have to look at the details of the code to ensure everything is working properly, but does not need to check the code extensively to ensure correct functionality from the units.

testAdmin - A **Black Box** test will be performed by the testers acting as administrators to ensure that the admins are allowed to perform the required tasks, such as adding and removing books from the catalog.

* testAddBook **- Grey Box**
* testRemoveBook **- Grey Box**

Both unit tests will be Grey Box tests because the testers will be both focusing on functionality and peeking under the covers of the code to check that it is working as it should

testBooks - A **Black Box** test for Books class will be conducted after the individual unit tests for each method have been completed successfully.

* testPrepInsertQuery **- Grey Box**
* testToString **- Grey Box**

Both unit tests will be Grey Box tests because they will be complete by the testers and will be focused on functionality and only look into the details of code implementation to make sure everything is working as it should.

testBookList - The test for the BookList class after all unit tests have been completed for individual methods will be a **Black Box** test that ensures the class functions properly.

* testAdd **-** **Grey Box**
* testRemove **- Grey Box**
* testClear **-** **Grey Box**
* testReplace **- Grey Box**
* testGetEntry **- Grey Box**
* testToArray **- Grey Box**
* testContains **-** **Grey Box**
* testGetLength **- Grey Box**
* testIsEmpty **- Grey Box**
* testEnsureCapacity **- White Box**
* testMakeRoom **- White Box**
* testRemoveGap **- White Box**
* testCheckCapacity **- White Box**
* testCheckInitialization **-White Box**

All unit tests for BookList that are **Grey Box** tests are being completed by the Testers The testers are looking for functionality, but are still poking under the covers of the code to make sure everything is working as it should

All unit tests for BookList that are **White Box** tests are tests that have been completed by the developers because these are private methods that require the tester to see all details of the code implementation

testCatalogs - A **Black Box** test for the entire class will be completed once all methods are individually tested (via unit tests) to check that the class functions properly as a whole.

* testPrepInsertQuery **- Grey Box**
* testToString **- Grey Box**
* testAddBook **- Grey Box**
* testView **- Grey Box**

The unit tests for the Catalogs methods will be Grey Box tests because the testers will be focusing on functionality while also checking to make sure that the code implementation works as it should when needed.

testDriver (once all other tests are completed)

* Each Class will be integrated into the Driver class one at a time. We will perform **integrations tests** after each class is integrated and **regression tests** as needed.
* Once all units have been integrated successfully, **Black Box** test will be conducted on the Driver class with the tester acting in place of a user. The purpose of this test is to ensure that the main method in the Driver class is functioning properly so that all Use cases (as described in the Use Case Diagram) can be successfully carried out by the “user”.
* Any bugs found during this stage will be dealt with by the developers, who will conduct **White Box** testson the classes or specific methods where the bugs have been found and fixed.
* The **Black Box** test carried out by the tester will be repeated until the system functions properly without any visible bugs.