All functional requirements are indicated below, organized by importance in functionality. The test cases for each requirement can be found throughout section 1.2.

**High Importance**

*The following requirements are completely mandatory and the system could not perform the required functionality without them.*

* Login

The login item is significantly important to test as it is a core function of the system and must always function properly. Failure of the login procedure would mean the user could not get access to their profile thus being unable to use the system.

* Logout

The logout item is of great importance as well and must also function properly at all times. Failure of the logout item would be very bad for account security as a new user could go onto the system using the previous user’s information, accessing their courses and possibly changing their login information.

* Set Schedule Preferences

The set schedule preferences item is extremely important as it directly aids the user with creating their schedule. If this function were to fail, the user would be unable to filter the auto generated schedules, making the user search through all the possible schedules rather than provide a schedule with the desired times.

* Select Course for Schedule

Selecting courses for the schedule is required to function properly as this functionality is detrimental to the proper use of the system. Course selection failure would make generating a schedule impossible, thus failing the entire main functionality of the system. Selecting courses is therefore one of the top priorities of the system along with generating and selecting schedules.

* Generate Schedules

Generating schedules is a top priority of the system and must always function properly. The main purpose of the entire system is to generate schedules for students, therefore the schedule generation itself is of utmost importance. Failure to generate schedules removes the main functionality of the system, making it impossible for users to create their schedules for the semester.

* Select Schedule

Selecting a schedule must also always function properly and is another required function of the system, as it is the final step when users create and decide on their schedules. If this function fails, users will be unable to select the schedules they created, defeating the entire purpose of the system.

These high importance items require unit testing as load/unload are required to save user data and keep it secure, while the other items all provide functionality directly to the creation of schedules, the main purpose of the system. Login and logout will be used at least once every time the system is used or more if multiple users want to switch. The schedule related items may not be used every time the user logs on to the system, but each of these are mandatory whenever a user wants to make a schedule. This will occur at least once per semester and can be used multiple times to either change their existing schedule or view potential future schedules. Having any of these items fail is extremely severe. If any of the schedule related items fails, it becomes either extremely tedious or impossible to create and select a schedule. If logging in fails, the user cannot even begin creating their schedule. If logging out fails, there is nothing stopping another user from maliciously creating a poor schedule without their consent.

**Low Importance**

*The following requirements provide additional functionality and ease of use for the user but are not directly related to creating course schedules*

* Return to Homepage

Returning to the homepage is an important item as the user can access four different pages from the home page. Although not critical due to the user’s ability to go to the previous page, the return to homepage item should still function properly as an added feature that that allows for switching between pages more easily.

* View Academic Record

The view academic record item should always work properly as it is accessed by the home page and allows the user to see their academic record by clicking “Student Profile”. Failure of this item would block the user from accessing their own information including program, courses taken, and changing their password as well.

* View Course Listing

The view course listing item must always function properly in order for the user to check courses in a semester as well as their different sections and times. Failure would give users no way to check whether the courses they need are being offered in a given semester or to plan their schedules ahead of time.

* View Academic Progress

The view academic progress item is important as it helps the user see what courses he’s taken in relation to what’s being offered. This helps with planning the schedule and makes it easier for the user to see the progress in their current program. If this item fails, the system still works properly but it becomes more of a hassle for users to keep track of courses they have done and need to take.

* View Course Details

Viewing course details must always function properly as the entire course listing page becomes practically useless without this item. The course listing shows the location and time of the courses selected; if the system fails to show these details, users will gain no information on the courses other than that they’re offered.

* View News Feed

The news feed feature displays recent news from the New York Times on the home page. Having this item fail doesn’t affect the functionality of the system, but it should function properly regardless as an extra feature on the home page.

**Omitted**

*The following requirements were scoped out and are no longer requirements within the system*

* View Student Academic Record
* Modify Course Details
* Change language
* View professor profile