

Majorizer Testing Methods:

Four Total Test Runs that will Cover All TestIDs: **ScheduleBuildTesting**, **MessageSendingTesting**, **LoginTest**, and **AdminTest**. There is no overlap between tests. The only test dependent on other tests is T6.3.1, which can be deemed a success because all other tests can be deemed a success or failure based on one of the four test runs.

Description of Tests:

ScheduleBuildTesting:

To complete a trial of the ScheduleBuildTesting, the tester should be logged in as one of the Majorizer accounts and be on the Schedule Build Page. On each account the tester should complete 12 trials, one for each of the potential schedules that can be built with the 2 majors and 2 minors we have on Majorizer. The tester should then attempt to build the schedule, and time how long it takes for the schedule to be built. If the requested majors and minors would not allow a student to graduate on time, a message is provided instead of a schedule; this will count as a success if this was the expected outcome. If a schedule is built, was supposed to be built, and is accurate, then this is considered a success. If the time to build is under 30 seconds, this is a success. After each schedule build the tester should also see if the calendar updated to reflect the new schedule (only on student accounts); if it did it is considered a success.

MessageSendingTesting:

For this test the tester sends messages to all the possible advisors from each of the student accounts, testing to see if the message can be sent. The tester then switches to the advisor account where they see if the message went through. Finally the tester determines if the message can be approved or rejected. If the tester is able to do all three of these things, the test is considered successful.

LoginTest:

In this test the tester logs in to each account, and if the login is successful and all the pages on the account are accessible the test is considered a success. Also included in this test is accessing the help page on all the accounts; if the page is accessible from all pages of each account the test is considered a success.

AdminTest:

In this test the tester logs in to the admin account and goes through and creates and breaks all possible student-advisor connections. If all the connections can be made and broken, the test is considered a success.

Breakdown of Test Methods and TestID Connections:

T1.1	Schedule Forecasting Capability	ScheduleBuildTesting
T1.2	Two Minors Two Majors Input	ScheduleBuildTesting
T2.1	Student can send Course Requests to their Advisor	MessageSendingTesting
T2.2	Visual Calendar/Schedule	ScheduleBuildTesting
T3.1	Advisor can Approve Course Requests	MessageSendingTesting
T3.2	Advisor can Build Schedules for Students they are Advising	ScheduleBuildTesting
T4.1	Admin Controls Advisor-Student Connections	AdminTest
T5.1	1 Admin, 2 Advisors, and 4 Students are able to use the	LoginTest

	Website	
T6.1	Response Time: Schedule Build Loads in Under 30 seconds	ScheduleBuildTesting
T6.2	Ease of Use: Help Page Accessible at all Times	LoginTest
T6.3.1	All Functional and Nonfunctional Requirements are Testable	All 4 Test Runs
T6.3.2	Reliability: The forecasting process will always create accurately forecasted schedules	ScheduleBuildTesting

T1.1 ScheduleBuildTesting

- Can create a forecasted schedule; test each Major/Minor configuration on each Student and Advisor account.

T1.2 ScheduleBuildTesting

- Test that schedule can be built with two majors and two minors 5 times on each Student and Advisor Account (is built into test case T1.1, if T1.1 is success T1.2 is success). (Relates to test type key 12).

T2.1 MessageSendingTesting

- Test sending 5 messages from each student account to each advisor connected to their account. Go on Advisor account to see the message went through (Combo with T3.1)

T2.2 ScheduleBuildTesting

- Confirm that Calendar loads when Student Account is logged in to, and confirm the schedule updates after the creation of each schedule made during T1.1 testing.

T3.1 MessageSendingTesting

- Combined with T2.1; confirm that messages sent from students are visible on the advisor account, see success of whether the message can be approved or rejected.

T3.2 ScheduleBuildTesting

- If T1.1 is successful for all advisor accounts, this test case has been met. (Check account type column to determine success).

T4.1 AdminTest

- Connect, break, and then reconnect all Student-Advisor combinations.

T5.1 LoginTest

- Confirm that 1 admin, 2 advisors, and 4 students can log in to their accounts and access each page of their profile type.

T6.1 ScheduleBuildTesting

- Time each schedule build during T1.1 testing; if below 30 seconds then the test is considered a success.

T6.2 LoginTest

- Confirm that each account can click to the Help page from all pages of their account profile type.

T6.3.1 SUCCESSFUL BECAUSE ALL OTHER REQUIREMENTS CAN BE TESTED

- All test cases on this list can be deemed a success or failure.

T6.3.2 ScheduleBuildTesting

- All schedules created during T1.1 are accurately forecasted.