

Sprint 3 Plan

CSCE 120 Autograder Frontend Team

Scrum Master: Qinyao Hou

Product Owner: Saksham Mehta

Developers: Max Smith, Md Hasan Al Banna, Riddhi Ghate, Ryan Gonzalez, Mainak Sarkar

Customer Meeting

Meeting: Every Monday from 12:00pm-1:00pm, Peterson 322/Zoom

Summary

The main customer need is a usable, accessible frontend for the CSCE 120 autograding system that allows for easier creation and maintenance of assignments and their constituent tests. This application will streamline the process of creating autograded assignments by providing a GUI to generate new assignment GitHub repositories and interactively create new tests. The admin(s) of CSCE 120's github organization will have the ability to add new users and manage permissions, controlling who can view and edit tests within each assignment.

Stakeholders include CSCE 120 course instructors and teaching assistants, who need a simpler and more automated way to create, modify, and view autograded assignments, as well as students, who benefit from having high-quality tests for their assignments. The ability to run test cases independently within the interface will ensure that tests are behaving as expected and allow for rapid assignment development.

Icebox

Story Number	Feature name As a [kind of stakeholder] So that [I can achieve some goal] I want to [do some task]
1	Feature: Update Test schema As a CSCE 120 GitHub organization member So that I can more easily create tests of different types I want the test block to be represented in the backend as a JSONB type
2	Feature: Test Case Editor UI Updates As a CSCE 120 GitHub organization member So that I can more easily create tests of different types I want the test block to be able to see different fields for different test types
3	Feature: Adding new deploy keys As an instructor So that I can ensure secure access to the assignment repositories, I want to have the ability to add new deploy keys for assignment repositories in the CSCE 120 organization.
4	Feature: Move Tests b/t Groupings

	<p>As a CSCE 120 GitHub organization member, So that I can change which grouping a test is in, I want to be able to drag and drop tests from one grouping to another (Concatenate grouping & test number to produce test case numbers in code . tests)</p>
5	<p>Feature: Add GitHub user to organization As an administrator So that I can give new instructors and TAs access to the app I want to be able to add new GitHub users to the organization through the app</p>
6	<p>Feature: Remove GitHub user from organization As an administrator So that I can revoke instructors' and TAs' access to the app I want to be able to remove GitHub users from the organization through the app</p>
7	<p>Feature: Pull remote changes As a CSCE 120 GitHub organization member So that I can see modifications made (from outside of the app) to the remote repository I want the app to pull changes from the remote repository</p>
8	<p>Feature: Parse tests coming in from remote As a CSCE 120 GitHub organization member So that the app's database is updated with outside changes I want the app to parse outside code.tests file changes</p>
9	<p>Feature: File upload As a CSCE 120 GitHub organization member So that I can use specific files in tests I want to be able to upload a file to the remote repository</p>
10	<p>Feature: Points edit As a CSCE 120 GitHub instructor So that I can edit each test card with points and display in the test grouping bars I want to calculate the overall points to meet the 100.</p>
11	<p>Feature: Test refactoring As a developer So that I can more effectively test my code I want to have more flexible and usable Cucumber step definitions to mock the behavior of third-party services that the app communicates with</p>
12	<p>Feature: Add administrator role As the CSCE 120 course coordinator So that I can have a higher level of permission in the app I want to have an "administrator" role</p>
13	<p>Feature: Assignments table UI update As a CSCE 120 organization member So that I can more intuitively interact with the Assignments table I want to see more accessible styling and more clear labeling</p>
14	<p>Feature: File Selection As a CSCE 120 organization member So that I can select the files for a test I want to see a dropdown of nested files with a checkbox</p>

15	Feature: Test Block Partial As a CSCE 120 organization member So that I can see different test block partials based on the test type I want to see different partials when i select the different test type
16	Feature: File Browser Partial As a CSCE 120 GitHub organization member So that I can see the file tree of the remote repo I want to see a directory dropdown

Sprint Backlog

- **Sprint Goal:**

Sprint 3 will focus primarily on usability and functionality of the test case editor, as well as implementing UI changes requested by the client.

- Table of Tasks and Assigned Developers for Sprint-3:

Story Points	Tasks	Developers	Time Estimates	Points
1	Update <code>Test</code> schema <ul style="list-style-type: none"> • Modify the schema of Tests model (test_type) <ul style="list-style-type: none"> ◦ <code>actual_test</code> changed to <code>test_block</code> ◦ <code>test_block</code> type changed to JSONB • Updating the naming/usage of this attribute in the code • Fixing all tests that will fail due to this change • Within <code>Test</code> model, implement <code>get_test_block_str()</code> <ul style="list-style-type: none"> ◦ Depending on test type, properly construct string for <code>code.tests</code> 	Max	1 day	2
2	Test Case Editor UI Updates <ul style="list-style-type: none"> • Improve layout to follow wireframe • Move test block to bottom • Rendering of correct partial based on test type 	Max	1 day	1

4	Move Tests b/t Groupings <ul style="list-style-type: none"> • Drag and drop test cards within a group and between groups 	Yao, Max	1 day	1
9	File Upload <ul style="list-style-type: none"> • Add interface to upload a file from the user's machine to a specific path 	Hasan, Saksham, Mainak	2 days	3
10	Test Grouping UI Updates <ul style="list-style-type: none"> • Remove grouping name update • Addition of point editor next to each test • Point total at top • Add confirmation for deleting test grouping (low priority) 	Riddhi	1 day	2
13	Assignments Table UI Update <ul style="list-style-type: none"> • Left-justified text • Button renaming • Highlighting sorted column • Retarget link to edit page • Remove "Edit" button 	Ryan	1 day	1
14	File Selection Partial <ul style="list-style-type: none"> • Get GitHub file tree • Produce nested, scrollable checkbox dropdown • Array of file paths is produced from selected files 	Mainak, Riddhi	2 days	2
15	Implement Test Block Partial (partially completed from Sprint 2) <ul style="list-style-type: none"> • Implement all partials as text boxes/fields • Hook partials up to populate the test's <code>test_block</code> attribute 	Ryan, Yao	1 day	1
16	File Browser Partial <ul style="list-style-type: none"> • Display file tree of remote repo • Directory dropdown 	Hasan, Saksham	1 day	2

Links

- [GitHub](#)
- [Slack Invite](#)
- [GitHub Projects](#)
- [Heroku Deployment](#)