

## Sprint 4 Retrospective Report

### CSCE 120 Autograder Frontend

**Scrum Master:** Ryan Gonzalez

**Product Owner:** Mainak Sarkar

#### Links

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

#### Dates of the Sprint

Planning: 2 November to 8 November

Development: 9 November to 15 November

#### Information about team and member contributions

<u>Members</u>	<u>Assigned Tasks</u>	<u>Points</u> SUM(story_pts/num_devs)	<u>Percentage of Development</u>
Qinyao Hou	Live update for points, Replacing Includes Field with Dropdown, Implement drag and drop between groups	$3/3 + 2/2 + 1/1 = 3$	16.7%
Saksham Mehta	Radio button for single-choice file selection, graying out of "Create Test" button, General UI changes	$\frac{1}{2} + 2/2 + \frac{1}{2} = 2$	11.1%
Max Smith	Update Assignment schema to include approved_files attribute, Approved Files UI, Set "files_to_submit" in "run_autograder" script	$1 + 1 + 2/2 = 3$	16.7%
Md Hasan Al Banna	Radio button for single-choice file selection, graying out of "Create Test" button, General UI changes	$\frac{1}{2} + 2/2 + \frac{1}{2} = 2$	11.1%
Mainak Sarkar	File Selection Partial, Live Update for Points, Replacing	$2/2 + 3/3 + 2/2 = 3$	16.7%

(Product Owner)	Includes Field with Dropdown		
Ryan Gonzalez (Scrum Master)	Test Editor UI Updates Login pages changes	$1/1 + 1/1 = 2$	11.1%
Riddhi Ghate	File Selection, Live update for Points, Set files_to_submit in run_autograder script	$2/2 + 3/3 + 2/2 = 3$	16.7%

### **Full Project Individual Contributions**

<b>Members</b>	<b><u>Total Individual Points</u></b> Sprint 1 points are divided by 2 to stay consistent with how we calculated individual contribution in later sprints	<b><u>Total Team Points</u></b>	<b><u>Percentage of Development</u></b>
Qinyao Hou	$2.5 + 1 + 1.5 + 3 = 8$	8/66.5	12.03%
Saksham Mehta	$2.5 + 2 + 2 + 2 = 8.5$	8.5/66.5	12.78%
Max Smith	$2.5 + 4 + 4.5 + 3 = 14$	14/66.5	21.05%
Md Hasan Al Banna	$2.5 + 1 + 2 + 2 = 7.5$	7.5/66.5	11.28%
Mainak Sarkar	$3.5 + 3 + 1 + 3 = 10.5$	10.5/66.5	15.79%
Ryan Gonzalez	$2 + 1.5 + 1.5 + 2 = 7$	7/66.5	10.53%
Riddhi Ghate	$3.5 + 2.5 + 2 + 3 = 11$	11/66.5	16.54%

**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.

**Sprint Achievements and Summary of Stories implemented in this Sprint:**

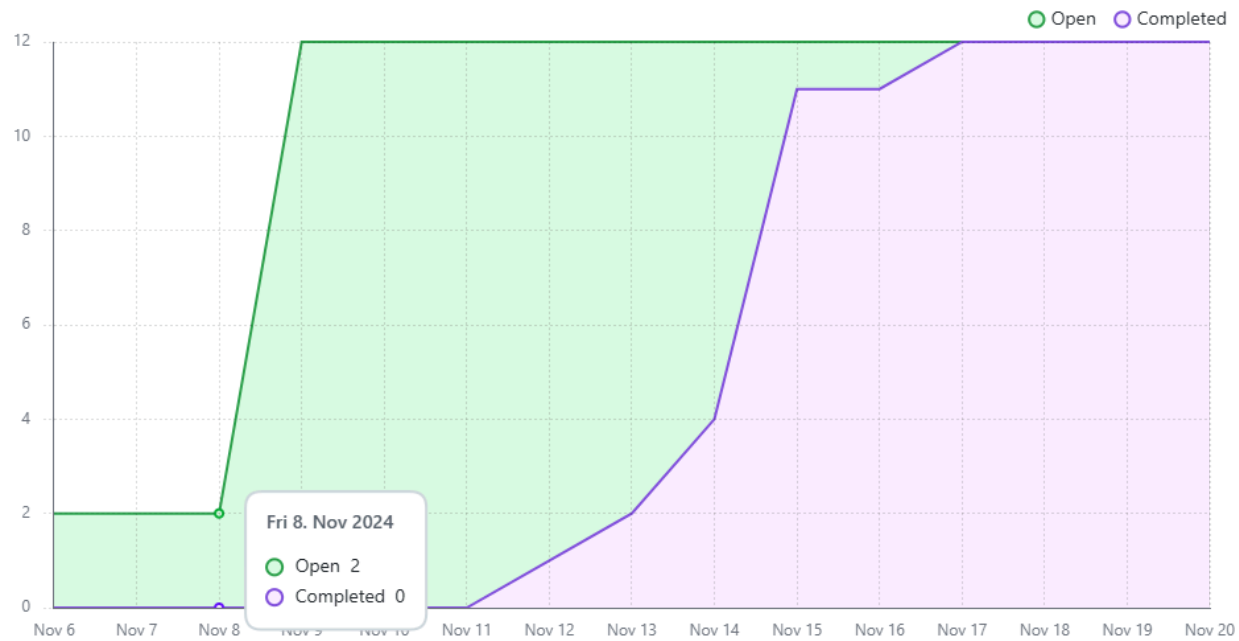
Story Number	Story	Completion
2	Move Tests b/t Groupings	Completed
9	File Selection	Completed
10	Select files for Includes attribute	Completed
11	Test Editor UI Updates	Completed
12	Update <code>Assignment</code> schema to include <code>approved_files</code> attribute	Completed
13	Approved Files UI	Completed
14	"Create Test" should be grayed out until minimum necessary information is entered	Completed
15	Live update for points	Completed
16	Login Page Changes	Completed
17	Set <code>files_to_submit</code> in <code>run_autograder</code> script	Completed
18	General UI changes	Completed
21	Radio button for single-choice file selection	Completed

### Sprint backlog items and status:

Story Number	Task	Explanation
2	<ul style="list-style-type: none"><li>• Implement drag and drop between groups</li></ul>	
9	File Selection Partial <ul style="list-style-type: none"><li>• Get GitHub file tree</li><li>• Produce nested, scrollable checkbox dropdown</li><li>• Array of file paths is produced from selected files</li></ul>	Completed
10	<ul style="list-style-type: none"><li>• Includes field should be replaced with checkbox file selection<ul style="list-style-type: none"><li>◦ Change <b>includes</b> attribute in <b>Test</b> model to a list of strings (schema change)</li><li>◦ Modify <b>code.tests</b> generation to support new schema change</li><li>◦ Update tests to remain compatible with change</li><li>◦ Potential minor change in the <b>Test</b> controller</li></ul></li></ul>	Completed
11	<ul style="list-style-type: none"><li>• Test Editor UI Updates<ul style="list-style-type: none"><li>◦ Test case deletion should require confirmation</li><li>◦ Overlapping to the right column (UI), wider landscape versus a portrait type</li><li>◦ Add units to Timeout field</li></ul></li></ul>	Completed
12	<ul style="list-style-type: none"><li>• Update <b>Assignment</b> schema to include <b>approved_files</b> attribute</li></ul>	Completed
13	<ul style="list-style-type: none"><li>• Add field to set <b>approved_files</b> during assignment creation</li><li>• Replace <b>target</b> field with dropdown of <b>approved_files</b></li></ul>	Completed
14	<ul style="list-style-type: none"><li>• "Create Test" should be grayed out until minimum necessary information is entered</li><li>• Asterisks should be next to all required fields</li></ul>	Completed
15	<ul style="list-style-type: none"><li>• Remove the existing edit points update form</li><li>• Add a single text field for updating points</li><li>• Update the total points on click</li></ul>	Completed
16	<ul style="list-style-type: none"><li>• Login Changes to take you dashboard rather than prompting you to login again</li></ul>	Completed

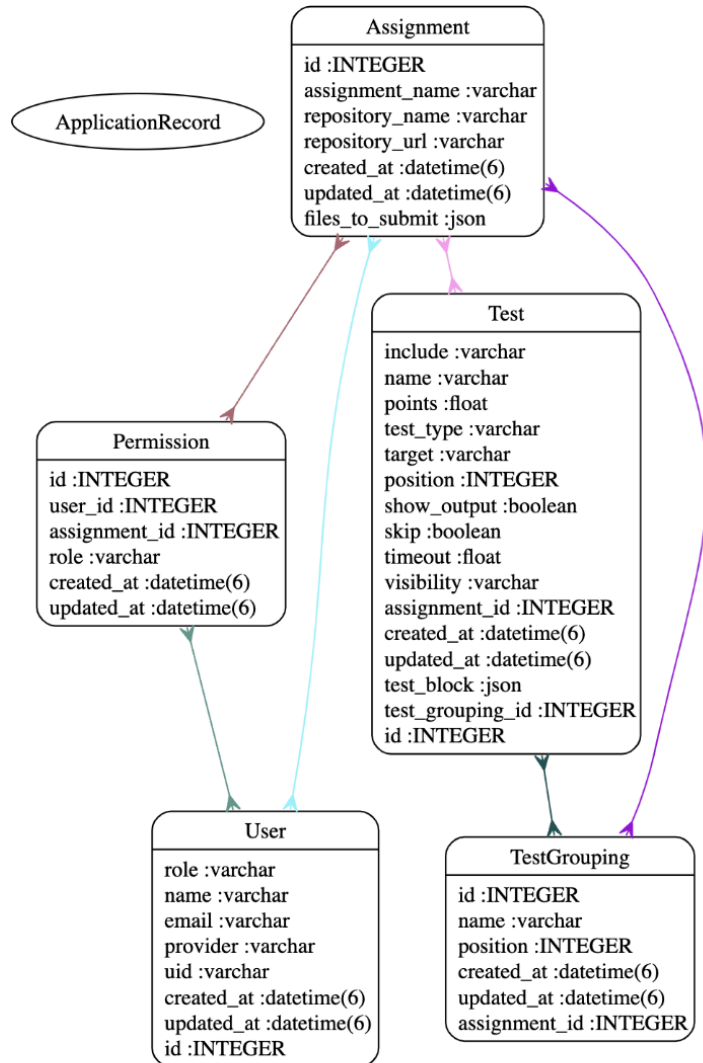
17	<ul style="list-style-type: none"><li>Set <code>files_to_submit</code> in <code>run_autograder</code> script</li></ul>	Completed
18	<ul style="list-style-type: none"><li>General UI changes</li></ul>	Completed
21	<ul style="list-style-type: none"><li>Radio button for single-choice file selection</li></ul>	Completed

**Burndown Chart:**



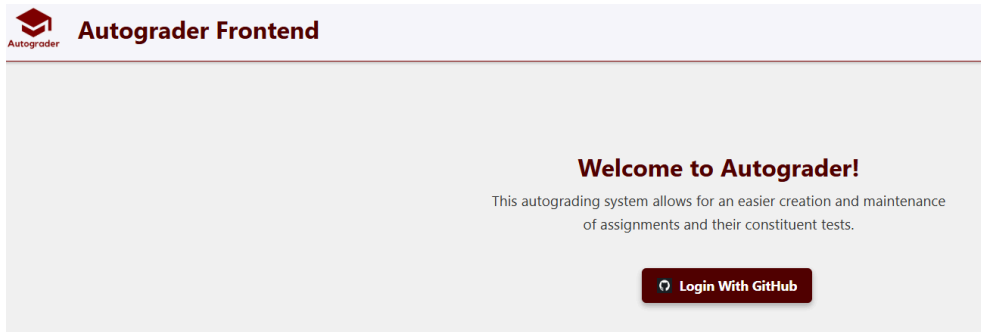
## Design diagrams:

Models diagram  
Date: Nov 22 2024 - 14:01  
Migration version: 20241113201410  
Generated by RailRoady 1.6.0  
<http://railroady.prestonlee.com>

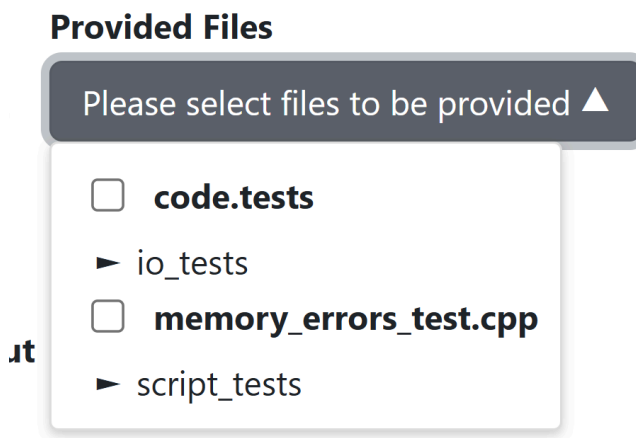


## Documentation of changes

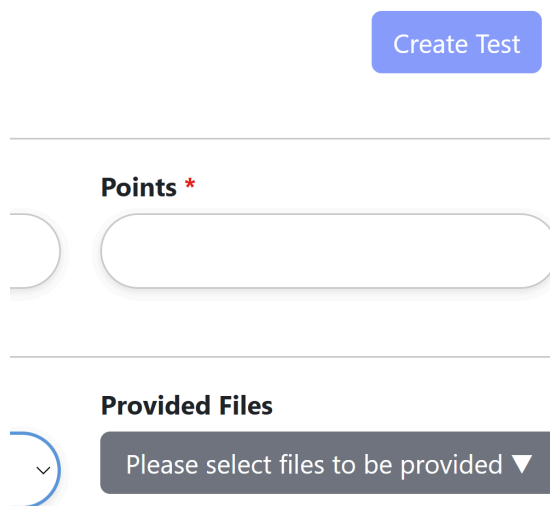
- General UI Changes with colors and Fonts:



- Radio button for single-choice file selection:



- Create test is grayed out until required fields are filled:



- Add field to set `approved_files` during assignment creation:

## New Assignment

### Assignment name

Assignment Name

### Repository name

Repository Name

### Approved files

Newline-separated list of files that students must submit

- Replace `target` field with dropdown of `approved_files`:

---

**Target \***

Select a target file

Select a target file

- code.cpp
- code.h
- code\_tests.cpp
- code\_interactive.cpp



- Live Points Update:

Total Points: 42.00

1)  
**Miscellaneous x  
Tests**

2)  
**group- x  
1**

1) tes... 5.0 pts.

- Test case deletion should require confirmation:

er-frontend-9219bed98016.herokuapp.com/assignments/1/test\_id=17

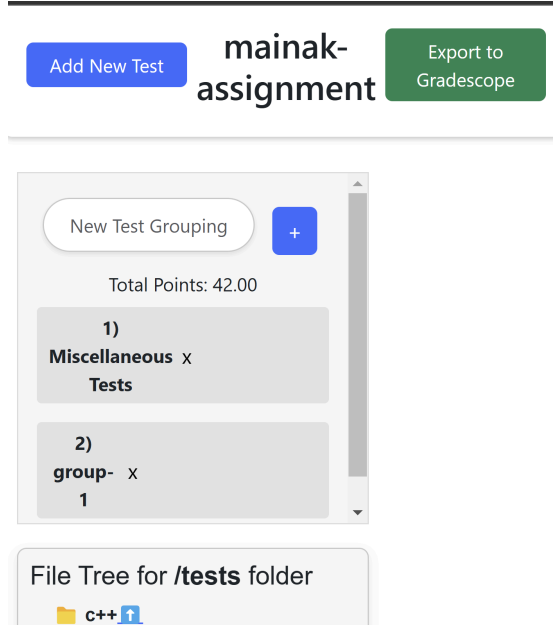
csce-606-autograder-frontend-9219bed98016.herokuapp.com says  
Are you sure?

OK Cancel

mainak-assignment Export to Gr

Name \* test-a1 Delete Test

- Overlapping to the right column (UI), wider landscape versus a portrait type

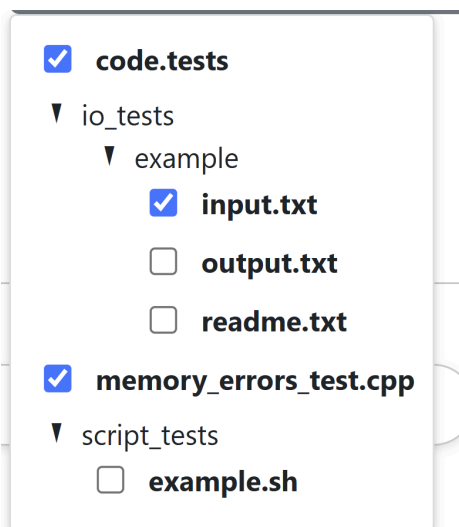


- Add units to Timeout field

### Timeout

0 seconds    Seconds

- File Selection Partial:



### **Evaluations of code and test quality:**

CodeClimate gives us an 'B' with 10 code smells.

Rubocop: No violations

Coverage RSpec + Cucumber: 97.7%

### **Customer Meeting**

**Meeting:** 18th November 2024, Monday at 12:00 pm, on Zoom

The client requested the following additions:

- Fix ssh key issue (see issue in GitHub)
- Remove unused test editor fields
- 2 decimal places of precision for test card points
- Includes not updating in code.tests
- Make points not required (default to 0)
- Approved files should be editable
- Test case drag-and-drop not moving
- Groupings should be movable
- Redundant seconds in test editor
- Fractional seconds for Timeout
- Move Delete Test button to bottom
- Rename to something like "Autograder Builder"

### **bdd & tdd**

Both tdd and bdd were followed for this sprint using cucumber scenarios and rspec tests.

### **Summary:**

Positives from this sprint/entire project duration:

1. We were able to meet a lot of our goals to meet the client's requirements
2. There was knowledge sharing and cross-communication between issues
3. Communication improved a lot from the last sprints
4. A boost in team morale and participation
5. We got better at subdividing tasks into more manageable subtasks and estimating task complexity

Lessons learned:

1. Better mirroring of Test and Prod environments
2. Better management of task allocation

3. Better planning and task sequencing
4. Continuous deployment and use of a staging branch would have been useful (fell through the cracks)
5. Earlier start/completion of tasks to give time for issues with feature merging