Weekly Progress Report (Week 7)

Team No. 510

Anthony Vo, Evan Gurry, Mateus Aurelio, Palak Tyagi

Sprint Review:

Status of the current sprint

Note: Use Item No. for non-user story work like infrastructure set-up.

User Story ID/ Item No.	Story Points	User Story Link	Owner	Status	Remarks
ITEM004-US006	5	n/a	Anthony, Mateus, Evan	In Progress	We will look into mathematical formula packages for TypeScript that we can use. Update: On hold, focusing on GUI and core data structure first. This will be our next top priority.
ITEM001-US001	3	n/a	Anthony, Mateus, Evan	In Progress	We will create a data structure to hold our cell data. Update: Finalized on data structure.
ITEM002-US001	…	n/a	Anthony, Mateus, Palak	In Progress	We will explore the React library to create components for the Options Pane and some buttons. Update: Finalized first pass of FileHeader and OptionsPane, beginning work on other two components.
ITEM001-US002	…	n/a	Anthony, Mateus	In Progress	We will add the ability to insert a column to the cell data. Update: Too ambitious, will tackle this next/later.
ITEM002-US002	…	n/a	…	On Hold	We will connect the ability to add a column to the “Add Column” button in the Options Pane. Update: Too ambitious, will tackle this after CellGrid is created.

Individual Contributions:

Please provide 1-2 sentences to describe the contributions of each team member during the past week.

Anthony Vo:

- Finalized main react components for FileHeader and OptionsPane that matches the style defined in Figma prototyping.
- Began work on FormulaBar, understanding how to read user input from a text box dynamically using states and hooks.
- Began work on CellGrid, in a rudimentary stage with a basic non-interactable, non-scalable table.

Evan Gurry:

- Finalized data structure for storing cells and their data with the spreadsheet.
- Started implementing functions for cell reference cells and cell range expressions on the Typescript side.

Mateus Aurelio:

- Finalized data structure for storing cells and their data with the spreadsheet.
- Created helper methods for finding specific cells and updating their positions.
- Created functions for creating new cell value objects given commands/inputs and updating cells with the new values.

Palak Tyagi:

- Finalized main react components for FileHeader and OptionsPane that matches the style defined in Figma prototyping.
- Began setting up user input system for cells.

Sprint Retrospective:

Please answer the below questions in 1-2 sentences (use more if something really went wrong).

What went well in the previous sprint?

Progress is going very smoothly. With the separation of tasks, it feels like we are able to properly distribute the workload and get things going much better than we anticipated.

What obstacles were encountered in the previous sprint?

We often got stuck on very mundane tasks, Googling around for a while about the best way to implement “x” or do “y”. From Pareto’s Law, 80% of the results come from 20% of the modules, so we should be focusing our efforts much better on the essentials.

What can we improve in the next sprint?

With Thanksgiving coming up, we will have to see how we will manage our time during break. We should try to meet more frequently while we have this free time.

Sprint Planning:

(NOTE: Everything from the past sprint is still "In Progress", so we continue these tickets.)

User Story ID/ Item No.	Story Points	User Story Link	Owner	Status	Remarks
ITEM004-US006	5	n/a	Anthony, Mateus, Evan	In Progress	We will look into mathematical formula packages for TypeScript that we can use. Goal: Select one specific parser package and attempt to implement a basic function, current priority.
ITEM002-US001	…	n/a	Anthony, Mateus, Evan	In Progress	We will explore the React library to create components for the Options Pane and some buttons. Goal: Have a working FormulaBar and interactable CellGrid (does not need to connect to data yet)
ITEM001-US002	…	n/a	Anthony, Mateus	In Progress	We will add the ability to insert a column to the cell data. Goal: Implementation functional, current priority.
ITEM002-US002	…	n/a	…	On Hold	We will connect the ability to add a column to the "Add Column" button in the Options Pane. Goal: Implementation works in the backend - on hold for front-end until CellGrid functional and connected to data.

Product Backlog:

User Story ID/ Item No.	Story Points	User Story Link	Owner	Status	Remarks
US001	13	https://github.com/neu-cs4530-fall2023/team510-project/issues/1	@everyone	Defined	As a user, I want to be able to create a blank spreadsheet so that I can start entering and storing data. Will have to break this down.
US002	5	https://github.com/neu-cs4530-fall2023/team510-project/issues/2	Palak, Evan	Defined	As a user, I want to be able to insert and delete rows and columns so that I can easily format my spreadsheet how I want it to look.
US003	5	https://github.com/neu-cs4530-fall2023/team510-project/issues/3	Mateus, Evan	Defined	As a user, I want to be able to insert, modify, and delete the contents of a cell (including its formula if used) so that I can enter and store data.
US004	3	https://github.com/neu-cs4530-fall2023/team510-project/issues/4	Mateus, Evan	Defined	As a data analyst, I want to be able to reference a single other cell and retrieve its value so that I can avoid adding redundant data.
US005	3	https://github.com/neu-cs4530-fall2023/team510-project/issues/5	Mateus, Evan, Anthony	Defined	As a data analyst, I want to be able to use range expansion (potentially in combination with formulas) to reference multiple cells so that I can quickly reference a lot of data at once.
US006	8	https://github.com/neu-cs4530-fall2023/team510-project/issues/6	Anthony, Mateus	Defined	As a data analyst, I want to be able to use formulas that can calculate values using data stored in other cell(s) (this includes the concatenation and arithmetic operators) so that I can quickly

					analyze the data I have.
US007	8	https://github.com/neu-cs4530-fall2023/team510-project/issues/7	Palak, Evan	Defined	As a user, I want to be informed when I make an illegal action (error handling) and tell me what I did wrong so that I can fix it without much hassle.
US008	8	https://github.com/neu-cs4530-fall2023/team510-project/issues/8	Palak, Anthony	Defined	As a user, I want to be able to save and open my spreadsheet so that I can continue editing it later with all the data intact.
US009	5	https://github.com/neu-cs4530-fall2023/team510-project/issues/9	Mateus, Anthony, Palak	Defined	As a visually impaired user, I want to be able to theme my spreadsheet application so that it is easier to view at night (dark mode), and for my weaker eyes (high contrast).
US010	5	https://github.com/neu-cs4530-fall2023/team510-project/issues/10	Anthony	Defined	As a visually impaired user, I want to be able to use this application using a screen reader application so that I am still able to use the software despite being visually impaired.
ITEM002-US010	3	n/a	Anthony, Mateus	On Hold	We will look into some popular text-to-speech services to assist in our screen reader.
ITEM003-US009	2	n/a	Anthony, Mateus, Palak	On Hold	We will look into color schemes and specific accessibility designs that will help the visually impaired.
ITEM004-US006	5	n/a	Evan	On Hold	We will look into mathematical formula packages for TypeScript that we can use.

General Scrum/Agile related guidelines:

- Spend the initial sprint to capture the work you foresee from now until the end of the project and create placeholder User Stories (with status defined) or Items for them (assigning tentative estimates if possible). These should all be part of the Product Backlog.
- Lifecycle (status) of User Stories:
    - Defined: User story exists for work item but several details are missing and is not ready to start development. (Exists in the Product backlog)
    - Ready: User Story has all the details (estimate, acceptance criteria, etc.) filled in and there is sufficient detail to start development. (Exists in Product backlog and can be pulled into a sprint)
    - In-progress: Some developer is working on the story (should have an explicit owner)
    - QAT (Quality Assurance Testing): (optional) Development complete and is being tested.
    - Complete: The development and testing for the story is complete and it is ready to demo.
    - Accepted: The demo is satisfactory and meets the acceptance criteria. Signifies successful implementation.
- User stories can move back and forth as part of development and testing.
- You can have multiple stories as “Defined” in the Product backlog and you can fill in information and move them to “Ready” as you have more information.
- However, a story must be “Ready” before you can include it in a sprint plan.