Snapshot Week <6> of Group <Path5>

Project: ATSYS_Shortest Path Algorithm for Material Transportation

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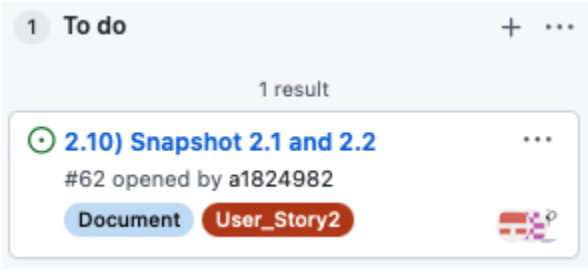
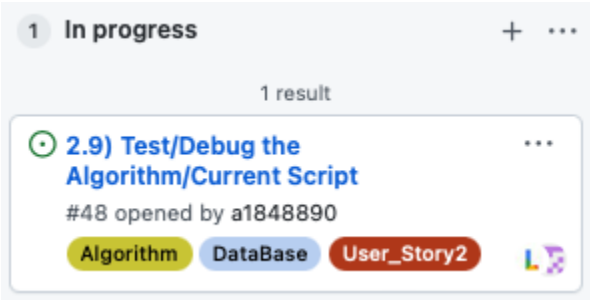
Product Backlog and Task Board

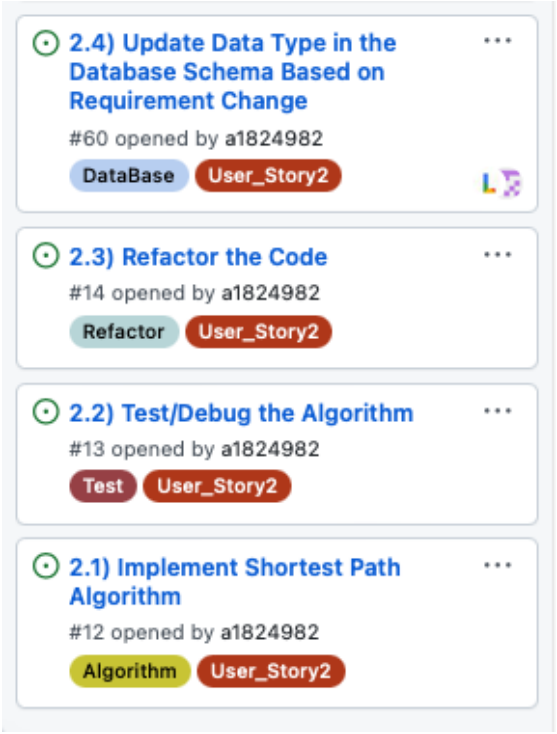
Product Backlog

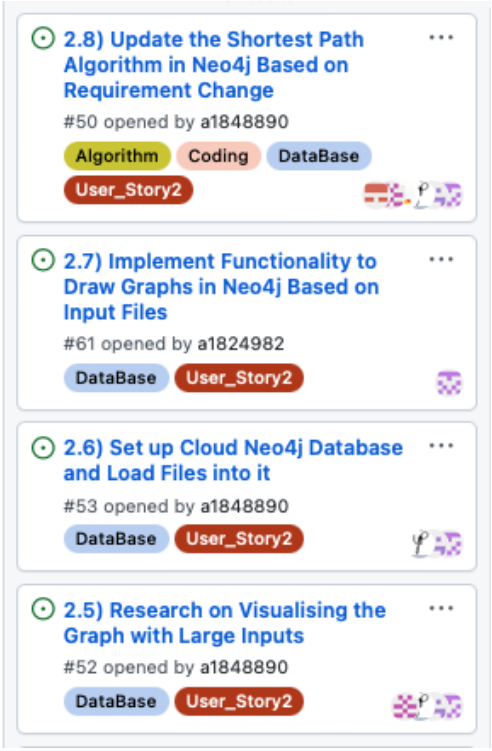
User Story 1	User Story 2	User Story 3
As a user, I want to store devices in the system so that I can add/remove/update them.	As a user, I want to get the shortest path between 2 given devices so that material transportation will be efficient.	As a user I want to mark devices to exclude, so that shortest paths can be identified avoiding them.

Task Board for Sprint 2 Snapshot 2.2 (User Story2)

To Do	In Progress
	

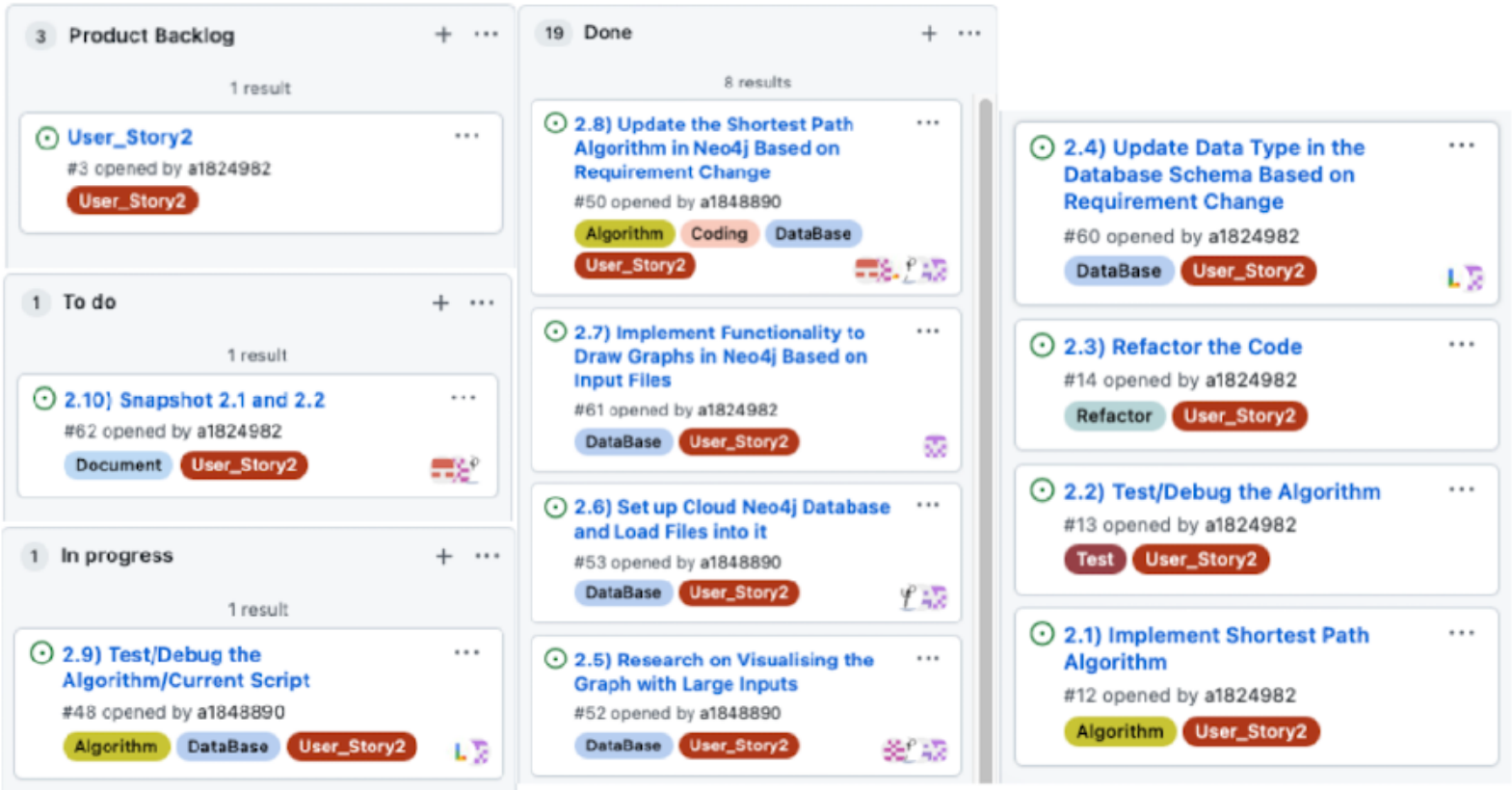
Task Board for Sprint 2 Snapshot 2.2 (User Story2)
Done





Sprint Backlog and User Stories

Sprint Backlog



In the second sprint, the user story our group is working on is: ***'As a user, I want to get the shortest path between 2 given devices so that material transportation will be efficient'***.

In this user story, users are requesting a method to determine the top 5 efficient routes between two given devices. This functionality will enable them to effectively and promptly manage the transportation between their plants. The purpose is to increase the overall productivity and cost efficiency.

An algorithm needs to be designed to accomplish this requirement. This algorithm should calculate the cost of paths between the selected devices. It will make a

recursion approach to ensure that every device is visited, all routes are explored before calculating the cost and sorting them in order.

Definition of Done

- A coding task is considered to be completed when the code has been written in accordance with the coding standards outlined in the initial report, tested (both unit and integration) refactored as needed, successfully passed peer review and obtained approval from all members of the team.
- A non-coding task task is considered to be completed when it has been brainstormed, discussed, documented, reviewed and agreed upon by the team in a meeting to ensure everyone is aligned and informed about the task. Additionally, any specific problems that arose during the Sprint should be reported to the team in detail and converted to an issue on the GitHub task board.

Summary of Changes

During this week's snapshot, we have implemented many changes and updates to the project. Our primary focus was addressing the requirements change from the product owner. Highlights include:

1. Updated screen shots in Product Backlog and Sprint Backlog to make it more clearer to see and easier to understand.
2. Updated everything on Github Taskboard.
3. Moved from Mysql Database to Neo4j Cloud Database.
    a. Implemented commands to read in csv files.
    b. Able to generate path diagrams based on inputs provided by PO(tutor).
    c. More convenient when inputs are large.
4. Updated the Mixed attribute in our device table.
5. Updated the Cost attribute in our edge table.

Overall, these are the main changes our group made between the previous snapshot.