

Snapshot Week <5> of Group <Path5>

Project: ATSYS_Shortest Path Algorithm for Material Transportation

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Product Backlog and Task Board

Product Backlog

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.

4 Product Backlog

User Story 1

#2 opened by a1824982

User_Story1

User_Story2

#3 opened by a1824982

User_Story2

User_Story3

#4 opened by a1824982

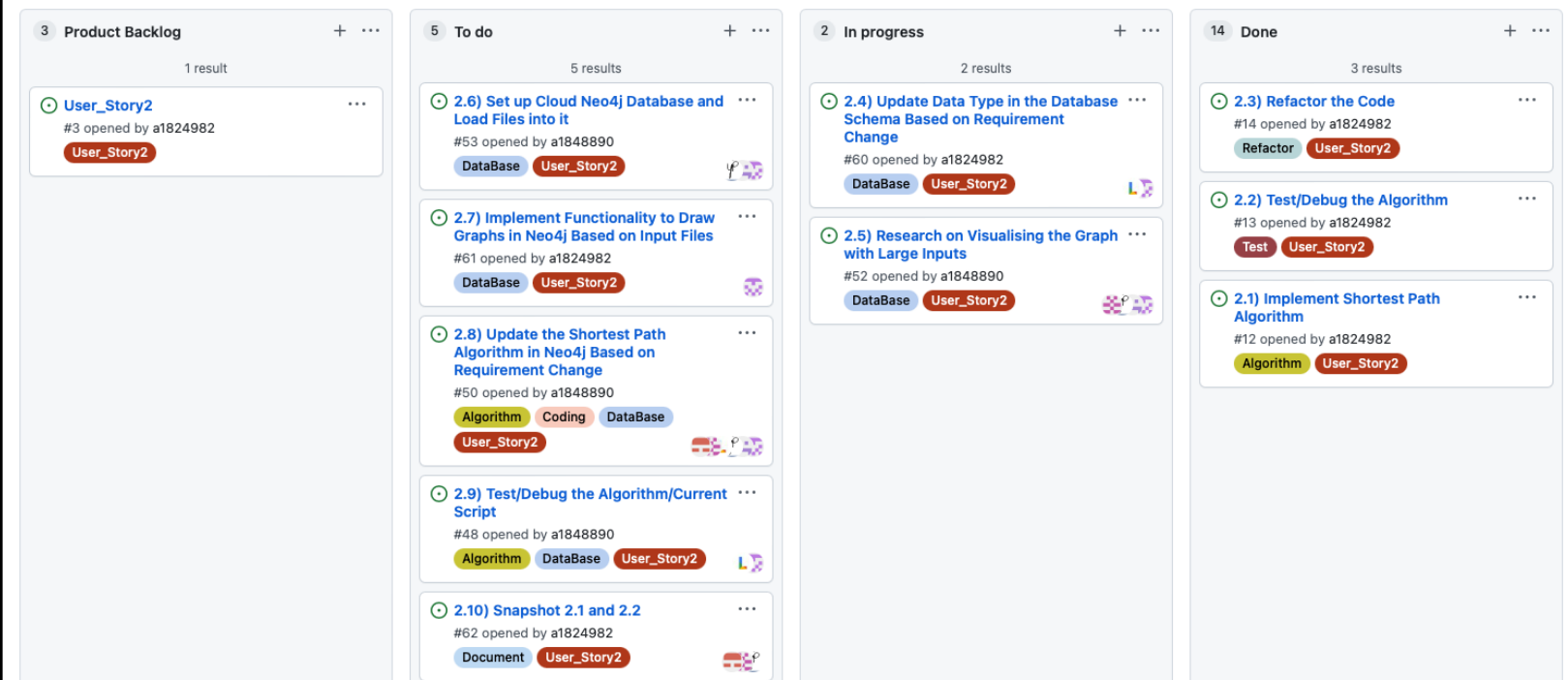
User_Story3

Task Board for Sprint 2 Snapshot 2.1 (User Story2)

To Do	In Progress	Done
<div>5 To do</div> <div> <div>2.6) Set up Cloud Neo4j Database and Load Files into it</div> <div>#53 opened by a1848890</div> <div>DataBase User_Story2</div> </div> <div> <div>2.7) Implement Functionality to Draw Graphs in Neo4j Based on Input Files</div> <div>#61 opened by a1824982</div> <div>DataBase User_Story2</div> </div> <div> <div>2.8) Update the Shortest Path Algorithm in Neo4j Based on Requirement Change</div> <div>#50 opened by a1848890</div> <div>Algorithm Coding DataBase User_Story2</div> </div> <div> <div>2.9) Test/Debug the Algorithm/Current Script</div> <div>#48 opened by a1848890</div> <div>Algorithm DataBase User_Story2</div> </div> <div> <div>2.10) Snapshot 2.1 and 2.2</div> <div>#62 opened by a1824982</div> <div>Document User_Story2</div> </div>		

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 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 several changes and updates to the project. These changes mainly focus on moving from user story 1 to user story 2, implementing the functionality of finding the shortest path as required in user story 2. Highlights include:

1. Finished the testing for codes/scripts written in user story1.
2. Implemented the algorithm to find the shortest path by using SQL commands.
3. Tested the scripts in the scenario stimulated in user story1.
4. Refactored the commands.
5. Updated everything on Github Taskboard.

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