

# Snapshot Week <8> of Group <Path5>

## Snapshot 3.2

**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 3 Snapshot 3.2 (User Story3)        |   |
|---|---|
| To Do   | In Progress   |
| <div> <div>1 Task Board</div> <div>0 results</div> </div> | <div> <div>2 In progress</div> <div>2 results</div> <div> <div> <div>3.6) Investigate on Optimising Operations for Users</div> <div>#65 opened by a1824982</div> <div>Refactor User_Story3</div> </div> <div> <div>3.5) Test/Debug the Algorithm</div> <div>#18 opened by a1824982</div> <div>Test User_Story3</div> </div> </div> </div> |

Done

25 Done

+

...

4 results

3.4) Integrate Exclusion Functionality

...

#15 opened by a1824982

Coding

User\_Story3

3.3) Update the Algorithm/Script in Neo4j to Take 'Status' into Consideration

...

#31 opened by a1848890

Algorithm

DataBase

User\_Story3

3.2) Implement the Functionality to Mark Devices as Excluded

...

#63 opened by a1824982

Coding

User\_Story3

3.1) Update 'Status' Attribute of Nodes in Device Table

...

#30 opened by a1848890

DataBase

User\_Story3

## Sprint Backlog and User Stories

Sprint Backlog

3 Product Backlog

+

...

1 result

User\_Story3

...

#4 opened by a1824982

User\_Story3

0 To do

+

...

0 results

2 In progress

+

...

2 results

3.6) Investigate on Optimising Operations for Users

...

#65 opened by a1824982

Refactor

User\_Story3

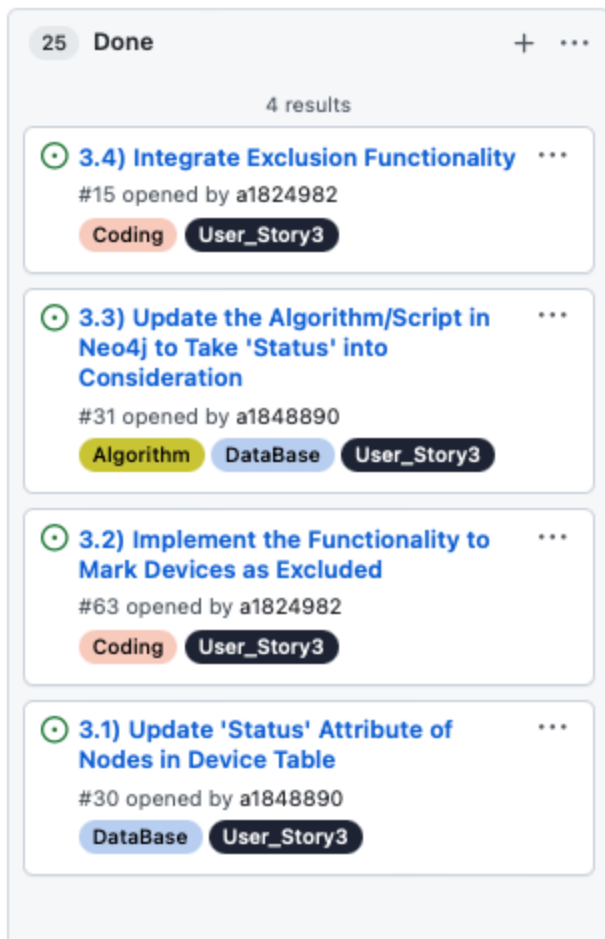
3.5) Test/Debug the Algorithm

...

#18 opened by a1824982

Test

User\_Story3



In the third sprint, we have moved on to the third user story: ***“As a user I want to mark devices to exclude, so that shortest paths can be identified avoiding them.”***

In this user story, users want to be able to exclude specific devices when calculating the shortest path between two given devices. Realistically, this functionality is important to implement because devices in the factory can be broken and including them in the calculation is not practical.

In order to achieve this, the database schema needs to be updated. To be specific, an additional attribute ‘Status’ will be added to our Device table to keep track of the condition of each device/node. Next, a logic condition will be added to our algorithm to avoid including unwanted devices into calculation.

## **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, few changes and updates have been made. These changes mainly focus on integrating all components from 3 user stories, testing the functionality and investigating on optimizing the process of how users interact with our software. Highlights include:

1. **New Functionality 'Exclusion'**: The Exclusion functionality is now integrated to our current algorithm.
2. **Updated Scripts**: Now, SQL commands/queries will be generated from a python script.
  - a. This can avoid complex and redundant inputs when users want to perform an operation
3. **Updated** everything on Github Taskboard.
4. **Improved** Visibility on Screenshots taken.

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