

Snapshot Week <12> of Group <Path5>

Snapshot 5.2

Project: ATSYS_Shortest Path Algorithm for Material Transportation

Members:

Shize Liu_a1844323

Yuze Li_a1848890

Ruoyu Xiong_a1847649

Yuchen Peng_a1824982

Yuejun Zhao_a1829813

Shijie Zhang_a1809881

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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.
User Story 4	User Story 5	
As a user, I want to get 5 shortest paths given a single source and multiple destinations, so that material distribution will be efficient.	As a user, I want the execution time of each operation to be optimised as possible and visualise the output (the 5 shortest paths) as a table or as a console output ordered by the path cost, so that user experience aspect will be improved.	

Task Board

Tasks For User Story 4

4.1) Implement Add Device/Edge Function and Test it ...

#73 opened by a1824982

Algorithm Test User_Story4

4.2) Design User Interface / Interaction Process ...

#74 opened by a1824982

Document User_Story4

4.3) Implement the User Interface ...

#75 opened by a1824982

Coding User_Story4

4.4) Modify the Calculate Cost Algorithm ...

#77 opened by a1824982

Algorithm User_Story4

4.5) Integrate the Interface and Functionality ...

#76 opened by a1824982

Coding User_Story4

4.5) Testing the Entire Program ...

#78 opened by a1824982

Test User_Story4

Tasks For User Story 5

5.1) Add the 'Timer Functionality' ...

#79 opened by a1824982

Coding User_Story5

5.2) Test if '1-to-1 scenarios' Reach Acceptance Criteria ...

#80 opened by a1824982

Test User_Story5

5.3) Test if '1-to-N scenarios' Reach Acceptance Criteria ...

#81 opened by a1824982

Test User_Story5

5.4) Optimise the Program if Needed ...

#82 opened by a1824982

Refactor User_Story5

Sprint Backlog and User Stories

Sprint Backlog		
ToDo	In Progress	Done
<div> <div>0 To do</div> <div>+</div> <div>...</div> <div>0 results</div> </div>	<div> <div>0 In progress</div> <div>+</div> <div>...</div> <div>0 results</div> </div>	<div> <div>37 Done</div> <div>+</div> <div>...</div> <div>4 results</div> <div> <div>5.4) Optimise the Program if Needed</div> <div>#82 opened by a1824982</div> <div>Refactor User_Story5</div> </div> <div> <div>5.3) Test if '1-to-N scenarios' Reach Acceptance Criteria</div> <div>#81 opened by a1824982</div> <div>Test User_Story5</div> </div> <div> <div>5.2) Test if '1-to-1 scenarios' Reach Acceptance Criteria</div> <div>#80 opened by a1824982</div> <div>Test User_Story5</div> </div> <div> <div>5.1) Add the 'Timer Functionality'</div> <div>#79 opened by a1824982</div> <div>Coding User_Story5</div> </div> </div>

In the fifth sprint, we started working on a new user story: **“As a user, I want the execution time of each operation to be optimized as possible and visualize the output (the 5 shortest paths) as a table or as a console output ordered by the path cost, so that user experience aspect will be improved”**. In this user story, users want to enhance efficiency by reducing waiting times for calculating the top five shortest paths. This optimisation on the program aims to make the user experience smoother and more responsive. Beyond that, the users ask to visualize the output in a structured format, so they can quickly identify the five shortest paths which improves user experience. We will 1) implement a timer function to keep track of the time taken for each operation 2) optimize our algorithm to meet the criteria and requirements from users 3) structure our outputs.

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, several changes, updates have been made. These changes mainly focus on: 1) Optimizing the execution time for each operation
Highlights include:

1. **Testing** our program to make sure each operation takes reasonable time.
2. **Optimizing** our program's '1-to-N Scenarios'.
3. **Updated** everything on Github Taskboard.

Overall, these are the main updates made between the previous snapshot.