**Test Summary Report**

**Group 6**

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# Introduction

## 1.1 Background

Group project for SFT221, programming and ultimately testing a delivery pathfinding application. Functional, integration, and user acceptance tests are written, performed, and evaluated.

## 1.2 Structure of the Report

This report is structured in the following manner:

* Section 2, Overview, provides an overview of the significant events and activities.
* Section 3, Adjustments, records any modifications of the items from those areas agreed on previously, especially in areas that may cause concern to the group accepting the test results, including any references to supporting documentation that covers the reasons for the changes.
* Section 4, Assessment, provides a brief assessment of the comprehensiveness of the testing process.
* Section 5, Results, provides a summary of the results.
* Section 6, Evaluation, provides an overall evaluation of the testing process including any observed problems and/or limitations.
* Section 7 provides a summary of the major testing activities and events.

## 1.3 References

Please refer to our Jira and GitHub, in addition to milestone submissions.

# Overview

For the programming component, we had to write the code for our Shipment module in full, from start to finish, and modify existing functions, namely ShortestPath and getPossibleMoves, to get the program going, as they didn’t work in their initial form.

We tested the functions that we wrote in the Shipment module. For integration testing, we used a testing matrix to decide the factors that we want to test when multiple functions are involved. For user acceptance testing, we ran a simple mock simulation of a user activity to see that the program runs and is deemed feasible.

# Adjustments

We had to decide on the scope of the testing and functions over the course of the milestones so that it’s reasonably attainable within the time and skill limit of the group members. The main issue is that we found it difficult to understand the existing code and the pathfinding algorithm, and the instructions were not very helpful, so that delayed lots of our milestone and forced us to cut back on some of our prior expectations when it comes to delivering submissions on time and in a acceptable state.

# Assessment

We tried to run brief tests when it comes to functional and integration testing, to make sure that some of the basic validation and truck selection scenario test passes. This way, we can at least acknowledge that the fundamental aspects of the program are in place. We did not test the user acceptance department as thoroughly and rigorously as we could have, as this is a very complex and difficult process. It would have involved testing almost every edge case, like a complex combination of destinations and fuller truck loads, as well as edge cases to make sure the program doesn’t crash under special scenarios. We argue that it will take at least another two or three milestones to arrive at a more successful user acceptance testing outcome.

Of particular note is that we were unable to test diversions in the user acceptance testing. We would have needed to test every single point on a given diversion.

# Results

The tests have all passed, and the main program when we tested it ourselves did not incur any bugs or outstanding results.

# Evaluation

The testing process is satisfactory, but as stated above we wish that we could test the user acceptance department more competently if we had better resources. However, this might end up being an entire project on its own.

# Summary of Activities

All of our testing activities are described in our milestones. Overall, we feel that this is a somewhat adequate project, where we wrote and performed rudimentary tests that are nevertheless rough around the edges.