Group 5 Test Plan

1. **Introduction**

Test Plan Objectives:

To ensure that our software is working properly before releasing it to our customer.

Including the following:

* 1. Accepting correct weight, size and destination
  2. Throwing an error if any of them do not correspond with the limitation.

1. **Scope**
   1. **The following will be tested:**
      1. **Input validation for weight, size and destination**
      2. **Assigning trucks (Blue, yellow or green) with the correct input values while considering truck maximum size.**
      3. Display the correct output.
   2. **The following will not be tested:**
      1. The map will not be tested as it is expected to be correct.
2. **Test Strategy**

**To performing the test, the following tests will be implemented:**

3.1. Unit test (white box)

Make sure all inputs are corresponding with the limitation:

1. Weight: 0.1 - 1000 kg for one truck
2. Size: 0.25 / 0.5 / 1 cubic meters, maximum for truck is 36 cubic meters
3. Destination: Within the map, from A to Y and from 1 to 25.

3.2. Integration Testing (Black box)

1. For individual validation of user input, to make sure the error will be thrown

when user input is not within the limit, and accept correct input.

2. To ensure each individual units were combined correctly to produce the

Expected correct and incorrect results

1. **Test Reporting**

Document every test case for both black- and white-box in Excel file and Word file.

1. **Test Schedule**

(Follow the MS deadlines)

1. **Control Procedures**

**Ensure our test cases use values that regulate the flow control of black- and white-box**

**Testing. These test cases use “smart testing.”**

* **Within limitation values**
* **Special values (transition points, null, symbols, whitespaces)**
* **Outside of limitation values**

1. **Functions To Be Tested**

**In Input.c, two functions will be tested.**

* 1. void header();
  2. void input();
  3. int validatePackageWeight(double);
  4. int validatePackageBox(double);
  5. int validateDestination(char\* dest);

1. **Resources**
   1. Seneca blackboard
   2. SFT221 website
2. **Deliverables / Documentation**

Completed project files including:

1. .c and .h files
2. Scrum report
3. Test plan
4. **Tools**
   1. **Visual Studio**
   2. **Visual Studio Code**
   3. **MS office**
   4. **Git**
   5. **Github**
   6. **Jira**
5. **Approvals**

**Professor Robin Huang**