Marking Guide

Part B – Statistical Data Analysis and Presentation (worth 35% of total course mark)

There are 5 key components to this:

- 1. Data Analysis Program (including user manual) (50%)
- 2. Test Plan & Testing (20%)
- 3. Executive Summary (10%)
- 4. Updated Project Plan (10%)
- 5. Software Version Control (10%)

Marked out of 100, then times by 0.35 to get total mark. Unless otherwise specified, all group members should receive same mark.

Data Analysis Program (50 marks)

1. File Loading (10 marks)

The program correctly reads in the dataset and stores it in some internal data structure (list/panda/dataframe). It is also acceptable to have converted the csv/xls files into a database as long as this is done using Python and the script to create the database from the original datafiles is provided. Ideally this process should be automated (the program checks if the DB exists, if it does not, it creates it from CSV, else it loads the db).

2. Graphical Interface (15 marks)

The graphical interface follows the design document (roughly) and the interface works and allows access to the various features of the program. Small changes from the design do not need to be documented, but any large changes should have an explanation of why the design was not followed (this info can be appended to the updated Project Plan documentation if needed).

3. Required Features (20 marks)

Each of the required features is implemented and works within the GUI (approx. 4 marks each). Part marks awarded for partial functionality.

4. User Manual (5 marks)

<u>User Manual.docx</u>: A brief user manual should be created that explains how to use your software, illustrating them by using <u>informative screenshots of your software</u>.

Testing Plan & Testing (20 marks)

1. Software Testing Report (10 marks)

<u>Software Testing Report.docx</u>: Each of the sections should be filled out with results of the testing. Note, no code is required for the coverage/acceptance testing, so these sections should describe the results. For the unit testing, you should submit the unit test code in addition to putting the results in the test report. If you need to use a modified version of your main program for testing, you should also submit it.

2. Codes of Unit Tests (10 marks)

The various code required to carry out your unit testing. This will include any modified source code needed for testing. 20-30 unit tests is typical. Less than 10 is insufficient.

Executive Summary (10 marks)

Executive Summary.docx: You should use your software to prepare a report that analyses the data over a 12 month period (of your choice) and presents the results in an executive summary. Your report should present the results from all of your required features (5 sections) for your chosen dataset, and should contain images from your software as well as some analysis and comments about the data.

Updated Project Plan (10 marks)

Project plan.docx should be updated to reflect the progress through the project

1. WBS (2 marks)

Any changes to the WBS/Items/tasks should be detailed.

2. Activity Definition (2 marks)

For each new item or change in the WBS, the item should be further explained and include a time estimate that is reasonable.

3. Gantt chart (6 marks)

All of the items in the Activity definition should be listed in the Gantt chart with the relevant estimates and scheduling. You should have also tracked the actual start time and time taken. Also submit the updated **Gantt chart.xlsx**.

Software Version Control (10 marks)

<u>Git_log.txt</u>: A Git repository is correctly used for all contributions to the project. A Git log is attached and shows regular commits and pushes from all group members. If all commits happen at once near the end of the project, this will be marked as 2/10.