STAT0032: INTRODUCTION TO STATISTICAL DATA SCIENCE - GROUP PROJECT 2022-23

Structuring Your Report

The following is an example of how you could structure your report. I have written this in order to give you an idea of what I expect from these reports, but you do not need to follow the exact structure I have used. The most important is that there is a clear structure which helps the reader to (1) understand the problem you are doing (2) understand the tools (including data and methods) you are using to tackle this problem, and (3) the conclusions of your analysis.

- **Cover page:** The title of your report, your group number, etc... See the project description for more details.

- **Introduction (2-3 paragraphs):** This could include a discussion of the problem your data science team is tackling and its broader impact. As a good data scientist, you should always try to gain domain-specific knowledge when working on a project. You could include relevant references to newspaper or research articles talking about this problem to back-up this introduction.

- **Discussion of the problem and how you will study it (2-3 paragraphs):** This could include a rough plan of what the report will cover, including how your report will help your client with their problem.

- **Presentation of the dataset (2-3 paragraphs):** As a good data scientist, you should know your data well. Aspects of this data might be relevant for your analysis, and you might therefore want to describe these (potentially together with the use of figures).

- **Description of the goodness-of-fit tests (1 page):** Description of the hypothesis being tested, test statistic, distribution under the null, conclusion of the tests, etc. This would also discuss any assumptions required for the test, and a comparison of the different tests used. It could also include any conclusion of these tests and the insights these result give you.

- **Description of the two-sample tests (1 page):** Same as for the goodness-of-fit tests.

- **Conclusion (2-3 paragraphs):** How can your analysis benefit your client? What do you advise them to do? What are the limitation of your analysis?

- **Additional page**: A page providing references, describing individual contributions of group members, and including a plagiarism statement. See the project description for more details.

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