## CS 150: Guidelines for Writing Lab and Project Reports

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## **Description**

Your lab and project reports all have the same structure. The main differences lie in the complexity of the problem, the amount of data generated, the subsequent analysis and the length of the report. The lab reports have a minimum length of 3 pages and the project reports have a minimum length of 5 pages. The structure of a report has the following (numbered) sections:

- 1. Introduction This introduces the problem that you are trying to solve. What are the goals? What assumptions did you make?
- 2. Approach This section describes your approach to solving the problem. Example: design of the program, choice of algorithm and data structure. Include the design/architecture including the classes and the functionality/purpose of each class. Do not include a description of the methods.
- 3. Methods This section describes your experimental setup. Example: how many runs, what parameters did you use, why the particular choice of experimental setup, parameter values
- 4. Data and Analysis This section describes the data that you obtained (plotted) and your analysis of the data.
- 5. Conclusion
- 6. References Books, websites, project descriptions, APIs that you used for the experiment/project. These references **must** be cited within the body of the report. Use APA formatting for in-text and reference section citations. There are many online resources that give guidance on how to write APA citations; one is <a href="Purdue Owl">Purdue Owl</a>.

## Figures, Tables and References

There are additional requirements for each report:

- 1. Use a font size of at least 12-point. All text and images must be readable.
- 2. Each figure and table must be labelled and have (short)legends that describe the table. Discussions and descriptions in the text should refer to the tables and figures as Figure 1, Table 2, etc.,
- 3. Figures should have labels on the axes and the units for each axis should be clearly shown.

4. Each item in the reference section should be cited in the text.

All lab and projects reports **MUST** follow the above structure.