

Project Report Instructions

Each team of one person submits the report worth 10.5 % of your overall grade. This document specifies what information you should include in your report – it applies to both default and custom projects.

1. REPORT CONTENTS (3-5 PAGES)

Your report should be 3-5 pages (excluding references). Keep in mind that longer is not necessarily better; clear, concise writing will be rewarded! Consider using the following section structure, though you can use a different structure.

You should put the following information on the top of your report.

- **Title:** the title of your project (you can change this later)
- **Team member names:** List the names and @brandeis.edu email addresses of all of your team members.
- **Custom of Default Project:** Indicate which you are doing.
- **(Custom Kaggle project only):** If you chose the Kaggle project,
 - The project page link
 - The link of the most voted notebook

2. INTRODUCTION

The introduction explains the problem, why it's difficult, interesting, or important, and explains the key ideas of your approach and results. The introduction gives some space for motivation and captures the reader's interest.

If you chose the Kaggle project, write the section helping the reader understand how others approach this data/question. You could elaborate on some points on why your work is a nice next (or better) step.

3. APPROACH

This section details your approach(es) to the problem. For example, this is where you would describe the architecture of your algorithms. You should be specific when describing your main approaches. You can add some figures or equations if necessary. If you're using any code that you didn't write yourself, make it clear and provide a reference or link. When describing something you coded yourself, make it clear (so we can give you credit!).

4. ANALYSIS

This section contains the following.

- 1) **Data:** Describe the dataset(s) you are using. Add one or two figures if necessary.
- 2) **Algorithms:** Describe your methods and the evaluation metrics. Supply your intuition of why you choose a certain method against the others.
- 3) **Experimental details:** Report how you ran your experiments (e.g. model configurations, learning rate, training time, etc.)
- 4) **Results:** Report the results that you have found so far. Use a table or plot to compare results or compare against the existing notebook on the Kaggle. Comment on your results. Are they what you expected? Better than you expected? Worse than you expected? Why do you think that is? What does that tell you about your approach?

5. QUALITY WRITING

As a reminder, the University Writing Center provides extensive resources to help you improve your technical writing. It is your responsibility to make your writing count.

6. GRADING

Your project report will be graded holistically, taking into account many criteria: originality, performance of your methods, complexity of the techniques you used, thoroughness of your evaluation, amount of work put into the project, analysis quality, writing quality, demonstrating strong understanding, etc. Your report will be graded by the instructor.

7. CODE

- 1) You have to use Jupyter Notebook for your code reporting.
- 2) Click the Save button at the top of the Jupyter Notebook.
- 3) Select Cell → All Output → Clear. This will clear all the outputs from all cells (but will keep the content of all cells).
- 4) Select Cell → Run All. This will run all the cells in order, and will take several minutes.
- 5) Once you've rerun everything, select File → Download as → PDF via LaTeX (If you have trouble using "PDF via LaTeX", you can also save the webpage as pdf. [Make sure all your solutions especially the coding parts are displayed in the pdf, it's okay if the provided codes get cut off because lines are not wrapped in code cells](#)).
- 6) Look at the PDF file and make sure all your solutions are there, displayed correctly. The PDF is the only thing your grader will see!

8. TEAM CONTRIBUTIONS

If you are a multi-person team, we ask you to submit (on Latte) a brief summary of what each team member did for the project (about 1 or 2 sentences per person). We will read these descriptions. For almost all teams, it will have no effect (i.e. team members all receive same grade), but for teams with considerably unequal contribution, we may investigate and/or give different grades to team members.