## **Report Outline**

#### I. Introduction

- 1. What are we doing?
- 2. Why are we doing it?
- 3. What's in the report?

## II. Collecting Source From GitHub

- 1. Introduce the websites involved
  - 1. What is GitHub?
  - 2. What is Ghtorrent?
  - 3. What is Big Query?
- 2. Introduce what we are collecting from these sited
  - 1. metadata from Ghtorrent w/ Big Query
  - 2. GitHub project data
  - 3. GitHub commit data
- 3. Discuss pros/cons of collecting source from GitHub
- 4. Give an overview of the process of collecting data from GitHub
  - 1. getting metadata
  - 2. collecting project files
  - 3. collecting commit files
- 5. Give a technical description of each process
  - 1. Getting metadata
    - 1. how are we doing it
    - 2. what does the data look like
    - 3. technical issues not included in pros and cons
  - 2. Getting project files

- 1. how are we doing it
- 2. what does the data look like
- 3. technical issues not included in pros and cons
- 3. Getting commit changes
  - 1. how are we doing it
  - 2. what does the data look like
  - 3. technical issues not included in pros and cons
- 6. Final Thoughts
- III. Collecting Source From Codeforces
  - 1. Introduce the website
  - 2. Introduce what we are collecting
  - 3. Discuss pros/cons of collecting from Codeforces
  - 4. Give an overview of the process
    - 1. Collecting and transforming user data
    - 2. Collecting submissions using selenium
    - 3. Collecting submissions using links
  - 5. Give the technical details for each process
    - 1. Collecting and transforming user data
      - 1. how are we doing it
      - 2. what does the data look like
      - 3. technical issues not included in pros and cons
    - 2. Collecting submissions with selenium
      - 1. how are we doing it
      - 2. what does the data look like
      - 3. technical issues not included in pros and cons

- 3. Collecting submissions with links
  - 1. how are we doing it
  - 2. what does the data look like
  - 3. technical issues not included in pros and cons
- 6. Final Thoughts

# IV. Collecting Gender Information

- 1. Introduction to how we are labelling the data
  - 1. Collecting gender for first names
- 2. Information on available sources for this
  - 1. The APIs and websites available
- 3. The pros/cons of the sources
  - 1. how accurate are they
  - 2. what do they cost
- 4. Which source we chose and why
- 5. Explanation of the process
  - 1. Overview
  - 2. Technical details
  - 3. What this data looks like
  - 4. extra technical issues
- 6. Final Thoughts

#### V. Conclusions

- 1. Final thoughts
- 2. Discuss the strengths and weaknesses of our methods
- 3. Discuss future extensions and improvements