

ISSS609 Project Report

Project Title

Team Name

Team Logo/Graphics

Team Members

Name	ID	Email	Role	Peer Evaluation ¹

Sponsor and/or Clients (if any)

Name	Email	Organization	Department	Role

¹ Enter the relative contribution of the members: Enter 100% for every member if the contributions are equal.

Executive Summary

Describe the main business objectives (e.g., *Understand the sentiments about a brand or a company*) of the project and the proposed analytics techniques (e.g., *Sentiment Analysis of their mentions in the social media*). List expected (or hoped for) results and tangible deliverables. Provide only a top-level summary using a few sentences, as described on [Wikipedia](#).

Introduction

Expand on the Executive Summary. Introduce the data set and the analytics task(s) you performed in the project. Explain why these analytics tasks are useful (or can be potentially useful) and who are the potential users. You can re-use what you have written for the project proposal for this section. Add references if necessary.

Methodology

Describe the challenges with the selected task(s). Then give an overview of your solution and procedure for analyzing the data and how the various steps are linked together. For example, some steps are in sequential order because of their dependency while some other steps may be done in parallel because they are independent. Use diagrams to explain the procedure if it helps.

Solution Details

In this section, give an overview as well as the details for each step of your method for text analysis. Break down the section into subsections if needed.

Details should include the specific algorithm(s) and/or model(s) you have used. Discuss the main features, the advantages, and limitations of your chosen techniques. Describe how your solution (or which components in the solution) may help to address the challenges described in the previous section.

This section should focus mostly on text analytics methods you have adopted for the project. If you have used other tools to perform post-processing and analyses (e.g., use Excel to draw a pie chart to show the distribution of topics in a data set), leave it for the next section.

Experiments

In this section, describe how you prepare your text data using pre-processing techniques and how you design and conduct your experiments. Describe your data partition strategy for training, validation, and testing. Details should also include the experimentation platforms, software tools and hardware for running the experiments. Discuss any parameter setting you have chosen (e.g., number of clusters, number of topics, number of iterations). You may also include any discussion of the issues you have encountered and how you have resolved them.

Results and Analyses

In this section, present and explain the results you have obtained. Here are some ideas for result analysis.

- 1) Report the performance of the analysis you have done if it is relevant. For example, if you have evaluated the accuracy of your classifier, you can report it here.

- 2) Show sample output. For example, if you have done topic modeling, you can show some sample topics with their top-ranked words. If you have done clustering, you can find out the most representative words for each cluster and display them. If you have done sentiment analysis, you can show some sample sentences that are predicted to be positive or negative.
- 3) Show summaries/statistics of the output. For example, if you have done sentiment polarity classification on a data set that does not have ground truth sentiment labels, you can show the percentage of positive and negative documents/sentences. If you have done topic modeling, you can show the distribution over the different topics. Feel free to use tools such as Excel or Tableau to help you with the visualization.
- 4) Error analysis. You can take out the misclassified examples (in the case of classification analysis) and try to analyze the reasons behind the misclassifications.
- 5) Other insights you have drawn from the results. Connect the analysis to the potential users in the introduction paragraph.

Discussions and Gap Analysis

In this section describe what went well (and not well) in the algorithms, project (technical and non-technical limitations).

Gap analysis in terms on the data or technology or user requirements. This section is to share the ideas of what else can be done to improve the performance issues.

Future Work and Conclusion

What can be the extensions of this project and overall summary of the project. What are other relevant tasks to this project (at least two more) and how they can be useful for the users of the system.

Project Experiences/Reflections

In this section, discuss what you have learned through this project. Each member must also write about his/her individual contributions and learning experience (1 paragraph each). Points to consider:

- 1) Overall learning experience
- 2) Individual work done and learning experience (written by individual members)
- 3) Team collaborations experience
- 4) What you like and dislike about the project.

References

Please use APA [referencing style](#).

Alibali, M. W. (1999). How children change their minds: Strategy change can be gradual or abrupt. *Developmental Psychology*, 35, 127-145.

IMPORTANT: Do not exceed six pages for the main body of the final project report, including figures, diagrams, tables, and references. but excluding the cover page and appendices (of up to three pages). Be sure you provide a balanced treatment of the various sections in the report. For lengthy items, you can move them into appendices.