

Configuration Manual

MSc Research Project Data Analytics

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<u>ALL</u> internet material must be referenced in the bibliography section. Students are required to use the Referencing Standard specified in the report template. To use other author's written or electronic work is illegal (plagiarism) and may result in disciplinary action.

Signature:	
Date:	1st February 2023

PLEASE READ THE FOLLOWING INSTRUCTIONS AND CHECKLIST:

 Attach a completed copy of this sheet to each project (including multiple copies).
 □

 Attach a Moodle submission receipt of the online project submission, to each project (including multiple copies).
 □

 You must ensure that you retain a HARD COPY of the project, both for
 □

your own reference and in case a project is lost or mislaid. It is not sufficient to keep a copy on computer.

Assignments that are submitted to the Programme Coordinator office must be placed into the assignment box located outside the office.

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Configuration Manual

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1 Access the Primary Dataset and necessary files

1. The given link to Google drive is shared here for access to relevant project artifacts. Click me!

🔥 Drive	Q Search in Drive		丰	? \$	***	
+ New	My Drive > Colab Notebooks > Final	_Thesis_Code_Ar	tifacts 👻		▦	i
My Drive	Name \downarrow	Owner	Last modified	File size		
▶ Computers	Sentiment140_exp1	me	12 Dec 2022	-		
Shared with me	Saved_Models	me	12 Dec 2022	-		
C Recent	Saved_Embeddings_and_Preds	me	13 Dec 2022	-		
Starred	Results	me	12 Dec 2022	-		
II Bin	IMDB_exp2	me	12 Dec 2022	-		
Storage	Benchmark_Twitter	me	12 Dec 2022	-		
10.45 GB of 15 GB used	backups	me	11 Dec 2022	-		
Buy storage	Twitter_dataset_932k_Input.json	me	12 Dec 2022	386.6 MB		
	tweets_preprocessed.json	me	13 Dec 2022	127.2 MB		
	CO Part2_Final_code_Thesis_demo_IMDB.ipynb	me	00:48	912 KB		
	CO Part1_Final_code_Thesis_demo_Sentiment140	me	00:49	1.2 MB		

Figure 1: Google Drive location for relevant project files

2. Explore the shared drive location for Primary dataset ('Twitter_dataset_932k_Input json') and relevant files. .

3. Models and predictions were saved for reuse in Saved_Models folder.

4. Colab notebooks starting with names Part1 and Part2 are the main project development codes. You can start here.

2 Google Colab Pro+ IDE for development

2.1 Choose the right Colab Membership for you

For this development project Pro+ membership was subscribed however, regular plans may allow execution (although execution time may vary).



Figure 2: Google Colab Subscription for development and testing

2.2 Setup Google Colab IDE for Code Testing

1. Download the project files from the above mentioned drive link onto your google drive and update the drive paths in the code.

2. Open collab notebooks 'Part1_Final_code_Thesis_demo_Sentiment140ipynb and Part2_Final_code_Thesis_demo_IMDB.ipynb for code setup. Both the code can be run independently for results. Sections have been designed properly to help with code understanding.



Figure 3: Google Colab Subscription for development and testing

3. Install Dependencies using 1st code cell to mount drive and necessary dependencies

for testing.



Figure 4: Google Colab Subscription for development and testing

3 Code Execution Steps

1. The whole code has been designed to run with 'Run all' feature in Google Colab, however it is advised to skip some steps to avoid long execution cycles. Comments and Hints have been marked throughout the code for testing.

2. The commented read commands can be uncommented to boost execution time instead of running section 3 Benchmarking step in each code.

3. All is set! You can now run the code section by section for Testing.