

**Ateneo de Manila University**  
**Department of Quantitative Methods and Information Technology**

**Certificate of Authorship**

**Instructions**

- Accomplish the document completely
  - Save the document as a .pdf file with the following name format:  
<IDNumber>\_<RequirementTitle>\_COA (e.g. 12345\_Assignment1\_COA)
  - Attach this document to each course requirement submission unless otherwise specified by the Course Instructor
- 

**Certification**






I hereby certify that the submission described in this document abides by the principles stipulated in the student handbook.

I further certify that I am the author of this submission and that any assistance I received in its preparation is fully acknowledged and disclosed in the documentation.

I have also cited all sources from which I obtained data, ideas, or words that are directly copied or paraphrased in this document. Sources are properly credited according to accepted standards for professional publication.

I am aware that any potential case of plagiarism or cheating (similar code) regarding my submission merits a 0 for the requirement and a disciplinary case filed to the Discipline Committee of the Loyola Schools.

**Student and Course Information**

<b>Course Code &amp; Section</b>	ITMGT 25.03 A		
<b>Course Instructor</b>	Joseph Benjamin R. Ilagan		
<b>Students' Full Names and Signatures</b>	Garing, Kiana Alecsandra A.	202273	
	Lumawig, Javier Miguel R.	203093	
	Vallester, Sinead Dylan P.	205306	
	Villafuerte, Lance Wesley G.	205380	
	Yu, Angela Terese N.	205524	






**Ateneo de Manila University**  
**Department of Quantitative Methods and Information Technology**

**Certificate of Authorship**

**Sources**

- <https://github.com/kevinzg/facebook-scraper>
- <https://github-dotcom.gateway.web.tr/kevinzg/facebook-scraper/pull/188>
- <https://www.danielherediamejias.com/facebook-scraping-and-sentiment-analysis-with-python/>
- <https://stackoverflow.com/questions/8199041/writing-a-python-list-into-a-single-csv-column>
- <https://stackoverflow.com/questions/15063936/csv-error-field-larger-than-field-limit-131072>
- <https://intellipaat.com/community/32903/pandas-convert-strings-to-time-without-date>
- [https://pandas.pydata.org/docs/reference/api/pandas.Series.to\\_frame.html](https://pandas.pydata.org/docs/reference/api/pandas.Series.to_frame.html)
- <https://stackoverflow.com/questions/59390812/custom-xticks-labels-on-a-bar-chart-matplotlib>
- <https://www.kite.com/python/answers/how-to-extract-integers-from-a-string-in-python>
- <https://www.geeksforgeeks.org/facebook-sentiment-analysis-using-python/>
- <https://stackoverflow.com/questions/22649693/drop-rows-with-all-zeros-in-pandas-data-frame>
- <https://stackoverflow.com/questions/16910114/delete-a-group-after-pandas-groupby>
- <https://support.minitab.com/en-us/minitab/18/help-and-how-to/graphs/how-to/matrix-plot/interpret-the-results/key-results/>
- <https://pypi.org/project/facebook-scraper/>
- <https://pypi.org/project/googletrans/>
- <https://jakevdp.github.io/blog/2017/12/05/installing-python-packages-from-jupyter/>
- <https://blog.hootsuite.com/social-media-sentiment-analysis-tools/>
- <https://dl.acm.org/doi/abs/10.1145/3361785.3361814>

**Student and Course Information**

<b>Course Code &amp; Section</b>	ITMGT 25.03 A		
<b>Course Instructor</b>	Joseph Benjamin R. Ilagan		
<b>Students' Full Names and Signatures</b>	Garing, Kiana Alecsandra A.	202273	
	Lumawig, Javier Miguel R.	203093	
	Vallester, Sinead Dylan P.	205306	
	Villafuerte, Lance Wesley G.	205380	
	Yu, Angela Terese N.	205524	





**Ateneo de Manila University**  
**Department of Quantitative Methods and Information Technology**

**Certificate of Authorship**

**Sources (cont.)**

- <https://pandas.pydata.org/docs/reference/api/pandas.DataFrame.plot.kde.html>
- <https://web.archive.org/web/20150402183703/http://apstatsreview.tumblr.com/post/50058615236/density-curves-and-the-normal-distributions?action=purge>
- <https://www.youtube.com/watch?v=57qAxRV577c>
- <https://www.youtube.com/watch?v=ujld4ipkBio>

**Student and Course Information**

<b>Course Code &amp; Section</b>	ITMGT 25.03 A		
<b>Course Instructor</b>	Joseph Benjamin R. Ilagan		
<b>Students' Full Names and Signatures</b>	Garing, Kiana Alecsandra A.	202273	
	Lumawig, Javier Miguel R.	203093	
	Vallester, Sinead Dylan P.	205306	
	Villafuerte, Lance Wesley G.	205380	
	Yu, Angela Terese N.	205524	