MARK5828 Advertising Analytics GROUP Project CRITERIA

<1> Interim Video (<6 min) Presentation + 10 min Q&A (Total Marks = 5) Flexible video format is allowed. Perhaps, one way is that you record your voice in your powerpoint slide.	**Marks**
Project Goal? 1. What is your project goal? 2. Do you have particular research questions to answer? 3. Does the project positively impact people OR organization OR society as a whole positively?	1
Data in Moodle 1. Saatchi Art pricing – 3 painting datasets & 3 photography datasets 2. Kaggle Cartoon 3. Sydney Instagram 4. UNICEF Instagram 5. Climate Change Instagram 6. Kickstarter video for African American Female Founder 7. Kaggle Movie TMDB Box Office Prediction (movie summary, actor..) 8. If you have data for your research, other projects, and so on, you can use it. 9. We also encourage you to search for picture/video data. https://toolbox.google.com/datasetsearch **NOTE: EACH DATASET IS LIMITED TO ONE GROUP (excluding Saatchi Art). PLEASE EMAIL YOUR TUTOR THE DATA YOU WANT TO USE, AS EARLIEST GROUP GETS PRIORITY**. If you want to use your own dataset, you don't need to send an email. **Human coding:** - You can simply visit your own or particular companies' social media (e.g. Facebook, Pinterest, Instagram) and then make variables for yourself. - e.g.) Whether a particular object exists in the picture or not. - e.g.) Human perception/evaluation of visual content - Don't forget to collect social media engagement outcome (e.g. likes, pins, shares, comments, re-Tweets).	
Data Collection: Relevant data? 1. What is your data? How did you collect it? 2. Do you have relevant data to answer your research questions? 3. Although you use available data, please make additional X variables (at least, 2 variables) by humans (for yourself).	1
Data Exploration and Cleaning 1. Please make at least 5 plots using Power BI or Python. 2. What do you learn from your plots? 3. Did you revise your hypothesis? Or make a new hypothesis? 4. Did you clean your data? (e.g. dropping outliers or categories with only a few observation) 5. Do you feel that you need to analyze a subset of data? In other words, do you need to split your data into 2 or 3 parts to compare?	1
Initial Result 1. Run regression (use VIF) and interpret your result. 2. Does this result support your hypothesis?	1

What is your plan for your final presentation and report? — 1

1. Do you need to revise your project goal / research questions (hypothesis)?
2. Do you need to collect additional data or clean data more?
3. What additional analysis are you planning?
4. **Who is going to do what?**P
5. lans need to be a table where each row is task and person, and each column is a week.

Member	W4	W5	W6	W7	W8
Person A					
Person B					
Person C					
Person D					

Submission

- Flexible Video Format
  - You are encouraged to submit a video file (.3gp .avi .dv .dif .flv .f4v .mov .movie .mp4 .m4v .mpeg .mpe .mpg .ogv .qt .rmvb .rv .swf .swfl .webm .wmv .asf)
  - If using Youtube, you may upload a text document with a working URL.
  - If using voice recording via Powerpoint, you may upload the .pptx file (which should contain the recording)
- Make sure the video is less than 6 minutes.
- Only ONE person in the Group is required to submit to Moodle.

Deadlines

- **Due: Thursday 10pm Week 5 (21st March)**
- Cutoff: Friday 5pm Week 5 (22nd March) (Late penalty: -1 mark)
- You will NOT be able to make a submission after the cutoff date.

<2> Final Group 10 min Presentation + 10 min Q&A (Total Marks = 5)	**Marks**
Data Visualization 1. Please make at least 5 plots using Power BI or Python. 2. Please highlight your key findings with graph or plots (Visual communication) rather than simply reporting numerical values or tables. 3. Do not show unnecessary plots. 4. Make a prototype of an ad from your result.	2
Verbal Communication 1. Can the audience understand what you are trying to explain? 2. Are your group members presenting evenly? 3. Can you answer the audience's (TAs & students) questions properly?	2
Engagement - Pitching 1. Is the pitching interesting?	1

2. Are the audience engaged in the presentation or not?	
Time Management Presentations should not exceed 10 minutes. Your group will be stopped by the tutor at the 10 min 30 second mark (finish the current sentence).	
Submission - Please submit your presentation file(s) to Moodle (format is flexible). The tutor will using these files for your actual presentation - If you want to make a presentation through other uncommon/different means, please email the tutor BEFORE the submission due date. - Only ONE person in the Group is required to submit to Moodle.	
Deadlines - **Due: Thursday 10pm Week 7 (4th April)** - Cutoff: Friday 5pm Week 7 (5th April) (Late penalty: -1 mark) - You will NOT be able to make a submission after the cutoff date.	

<3> Final Group Report (Total Marks = 20)	**Marks**
Project Goal 1. What is your project goal? 2. Do you particular research questions to answer? 3. Does the project impact people OR organization OR society as a whole positively?	1
Data Collection 1. What is your data? How did you collect? 2. Do you have relevant data to answer your research questions? 3. Although you use available data, please make additional X variables (at least, 2 variables) by humans (for yourself).	2
Data Exploration & Cleaning 1. Please make at least 5 plots using Power BI or Python. What do you learn from your plots? Under graph or plot, please state key finding briefly. 2. Did you clean your data? (e.g. dropping outliers or categories with only a few observation) Please state your data cleaning process clearly. 3. Does your graph or plots support your hypothesis? 4. If you decided to split your data 2 or 3 parts to compare, please explain the reason.	3
Data Analysis 1. Make columns carefully for categorical variables. 2. Include necessary control X variables where applicable. 3. Run regression. 4. Check VIF (Variance Inflation Factor) to see multicollinearity. 5. Based on VIF, choose variables and then run regression again.	2

Interpretation 1. Which coefficient do you need to interpret to answer your research questions? 2. Do the variables affect your outcome variable (Y) significantly? 3. Does the sign of coefficient make sense? 4. Then, how much does the X variable affect your outcome variable (Y)? 5. Can you explain what your result means? Instead of showing numbers, can you produce a story about the analysis?	4
Suggestion for organization 1. Who will be the target organization which would get benefit from your analysis and suggestion? It does NOT have to be a commercial company. It can be a non-profit organization or government. 2. Based on your result, Is the organization doing well? What is their strength and weakness in their ad content if any? 3. Check the organization's business objective (via website, articles, etc). Considering their business objective and your result of data analysis, what would you suggest? 4. Make a prototype (eg, picture ad, video ad, etc) of ad content from your result (no need to be a fancy ad). For example, if Red turns out to be the best color, they can use red in their prototype. If a particular object has significant effect, they can use the object in their prototype.	4
Suggestion for computer vision algorithm 1. Are "human coded variables which you created" somewhat significant? ($p < 0.3$) Then, this might be good candidate variables which data scientist (e.g. computer vision algorithm experts) consider to develop. 2. Although you have not used some variables in your project, are there other variables which you wish to have via computer vision algorithm (e.g. Microsoft API) automatically? Why do you think so? Why not?	1
Future plan 1. Can you elaborate on possible future plans you might take with your team on this project? a. If you have more time, what additional analysis do you want to do more? b. Do you want to collect more pictures or additional X variables? 2. How do you want to use your result? Making them public by writing a blog? Or approaching your target organization to share your result? 3. Let's suppose that you want to be a social media content consultant or launch startup companies. How you can use your result? What would be your next 2 or 3 years plan?	2
Report Style 1. The report has clear references to good examples / data sources and research papers. Please include a reference/appendix where necessary. 2. The report is written in a clear and orderly fashion. 3. The report is highly understandable and is worthy of real-world recognition. 4. Your report should be no longer than 15 pages.	1
Submission - You are required to submit: - A **.pdf** of your report. In the beginning of your report, you are required to include the names and zIDs of all your group members. - A **.ipynb** containing all relevant code to get the results in your report.	

- Only ONE person in the Group is required to submit to Moodle.	
Deadlines - **Due: Tuesday 10pm Week 8 (9th April)** - Cutoff: Tuesday 10pm Week 9 (16th April) (Late penalty: -3 marks per day after due date) - You will NOT be able to make a submission after the cutoff date.	