**Capstone Project Data Science: WhatsApp Chat Analysis**

**Project description:** You can use your WhatsApp data for many data science tasks like sentiment analysis, keyword extraction, named entity recognition, text analysis and several other natural language processing tasks. It also depends on who you are analysing your WhatsApp messages with because you can find a lot of information from your WhatsApp messages which can also help you to solve business problems.

In this project you are expected to perform the analysis on the WhatsApp chat data and share the insights of it,

1. **Loading the chat data into python environment**
2. **Defining the specific function or methods for preprocessing the text data**
3. **Incorporating NLP techniques for cleaning the text data**
4. **Creating Word Clouds of the processed chat data**
5. **Save the images of word cloud into your system.**
6. **Extracting information through sentiment analysis.**

Before starting with the task of WhatsApp Chat analysis with Python you need to extract your WhatsApp data from your smartphone which is a very easy task. To extract your WhatsApp chats, just open any chat with a person or a group and follow the steps mentioned below:

If you are having an iPhone, then tap on the Contact Name or the Group Name. In case you are having an Android smartphone then tap on the 3 dots of top right.

1. Then scroll to the bottom and top on Export Chat.

2. Then select without media for simplicity if it asks you whether you want your chats with or without media.

3. Then email this chat to yourself and download it to your system.

So, this is how you can easily get your WhatsApp chats with any person or a group for the task of WhatsApp chat analysis.

**Evaluation Scheme:**

**Total marks:** **100**

**Deliverables [Total marks - 95]:**

1. Downloading the data from WhatsApp – 5 marks
2. For all the 6 tasks mentioned above, each carries 15 marks – 90 marks.

**Project Submission [Total marks - 5]:**

1. Once the project has been created, upload all the files on GitHub & commit (save) all the changes, make sure you add a readme file containing detailed description of your thoughts during the project creation. **[3 marks]**
2. Once done, kindly copy the GitHub link of your project & submit the same using your dashboard. **[2 mark]**