**Data Scientist Assignment**

In the process of taking your candidature for Data Scientist forward with MiQ Digital India Pvt. Ltd., you are expected to come up with solutions for a real-world Digital Marketing problem. Please go through the problem statement carefully. You have been provided with individual datasets for the problems in .txt format.

1. Problem 1: The client is an online ecommerce player. They have shared a user level log data for their browsing behavior (Timestamp, UserId and website section visited). You have been provided with the final conversion data too (Timestamp, UserID, Products Purchased in the transaction, Overall Cart Value). Based on this data you are required to build features and model on these characteristics of users to calculate a score/rank for conversion probability of that user. These scores will eventually decide the bidding logic used for each user. Your model will be evaluated on these criteria: -
   1. Feature Engineering (Variable Imputation)
   2. Model Selection Criteria (Basis of choosing the final Technique)
   3. Measurement Criteria (Comparison of Various Models)
   4. Scope for improvement

How you communicate the results to the non-tech team will play a very important role in the selection. You are encouraged to come up with ideas of leveraging the output of this exercise to assist Business Team in coming up with effective Targeting Strategies.

You have been allocated a time frame of 3 working days for submission. Feel free to exercise reasonable assumptions wherever applicable regarding the data set.

Expected Outputs:-

1. The Final code (Python or R) along with proper comments
2. A summary file (txt or MS Word format) stating
   1. Problem Statement
   2. Approach Taken
   3. Interpretation of Results
   4. Minimal but effective Storyboarding - Consider the final audience of this will be the Business team. You need to bring the actionable insights in this section.