**MEETING MINUTES –**

**[Week 2 MEETING 1 OF INTEGRATED PROJECT\_GROUP #Carlos]**

**MEETING INFORMATION**

***Objective:*** Check Assignment, New Assumptions Teach

***Date:*** 05/30/2024

***Time:*** 8:00 AM EDT ***Meeting Type:*** Virtual Meeting

***Timekeeper:*** Carlos ***Note Taker:***  Ruizhe

***Attendees:*** Carlos (Mentor), Luyang(Mentee), Orange (Mentee), Ruizhe (Mentee)

**Meeting Documents**

* Country\_data.csv uploaded by Carlos
* K-Means Clustering notebook uploaded by Carlos
* LER Distribution notebook uploaded by Mentee team

**Progress Report**

Carlos introduced Machine Learning and K-Means Clustering techniques which will be used in the following project building. Carlos also mentioned that statement of work part 1 will begin on next Monday.

**Special Business**

1. **Illustrate the concept of Machine Learning**

Mentee team learns about the knowledge of machine learning. Carlos introduced several concepts that will be used in the project. Data science is science about how to collect, clean, and utilize data. Machine learning is technology combining computer science and statistics. It uses the data and different algorithms to build models for predictions. There are several classes of machine learning, which include supervised learning (classification, regression), unsupervised learning (clustering, dimensional reduction), and reinforcement learning.

1. **Illustrate the definition of K-Means Clustering and show example**

Mentee team studies what K-Means is and how to implement it in python. Carlos introduced K-Means clustering. It is an unsupervised clustering algorithm that classifies data into different clusters according to the distances between them. And Carlos also showed how to select cluster numbers and implement K-Means in Python.

1. **Discussion: Python scipy library function**

Orange found out that the distribution functions in scipy library have different input parameters order, which should be paid attention when using. The inappropriate order of input will make the distribution calculate with wrong parameters. So it is important to read python library files before using the function.

1. **Additional note: Meeting with Tom & Ira**

Mentee team meets with Thomas and Ira. Luyang asked the questions about the weekly deliverables. Tom explained about the weekly deliverables, and clarified the deadline for statement of work part 1. Mentee team is required to read the sample of the statement of work.

**Date and Time of the Next Meeting**

The students and mentors will meet on conference call on 05/31/2024 Friday.

**Close**

Students watch K-Means Clustering video and read pdf by June 3rd.

May 30, 2024

Recorded by

Ruizhe