Meeting notes with Dr. Mario:- (July 24, Wednesday)

Project Timeline Discussion: We discussed the project timeline and our goals for this semester.

Upcoming Dookie Visit: We shared insights on key objectives for our upcoming visit to Dookie.

Key Reminders from Mario: Mario emphasized important tasks that we should prioritize during our visit.

Focus Areas for Dookie Visit:

- **Data Collection:** Ensure the retrieval of useful data and insights.
- **Maximizing Datasets:** Aim to collect the maximum number of datasets available.
- **PhD Student Consultation:** Discuss the project in detail with the PhD student and understand any challenges they have faced.
- **Data Collection Process:** Investigate how data is collected, including the setup and workflow.
- **Robot Challenges:** Identify the challenges faced by the robots in the process.
- **Project Setup & Schedule:** Inquire about how the project was set up and details regarding the project schedule.

Meeting notes Dookie Visit:- (July 25, Thursday)

Data Extraction & Insights: We successfully extracted useful data and fields and began analyzing the data insights.

File Testing: We tested a single file to ensure its integrity and accuracy.

Dataset Collection: We obtained the maximum number of datasets available and experimented with additional templates.

Discussion with PhD Student: We had a discussion with Farhea, the PhD student, to gather more details about the project.

Technical Issues: We encountered frequent system crashes, occurring every 5-10 minutes, which hindered our progress.

Understanding Data Collection: We explored how data is collected, including the milking process and the overall workflow.

Robot Challenges: We examined various challenges that the milking robots might encounter during operation.

Meeting notes with Dr. Kristy:- (July 29, Monday)

Review of Dookie Visit Data: We reviewed the data files retrieved from the Dookie visit, discussing the various fields and their potential applications.

Lely Application Data Retrieval: Due to time constraints and it being our first experience with the Lely application's dataset retrieval feature, we were only able to obtain a few templates. Kristy later informed us about additional variables that may be useful.

Remote Data Access: We attempted to access the datasets from outside Dookie and confirmed that it is indeed possible to download them remotely.

Dataset Access Limitations: We discussed the limitations in accessing datasets, noting that the maximum data filter only allows for 1,100 days of data, and the maximum number of rows we can retrieve is approximately 2,000.

Support from Farhea: Kristy mentioned that her PhD student, Farhea, will be at Dookie, and we can contact her if we need any assistance.

Data Issues: We informed Kristy about the issues with the data, specifically the small file sizes and limited data history, which hinder our ability to make valuable predictions.

Meeting notes with Dr. Mario:- (July 31, Wednesday)

Dookie Visit Overview: We discussed our visit to Dookie, focusing on how datasets can be accessed and the structure of the data files.

Challenges Faced: We reviewed the challenges we've encountered, particularly those shared with Kristy in our previous meeting.

Project Timeline: The main focus was on adhering to the project timeline. We emphasized the importance of staying on schedule to avoid work piling up, which could make it difficult to manage later.

Addressing Doubts: We agreed on the importance of promptly addressing any doubts or issues with Kristy to avoid delays.

Technical Issues: We also discussed the recurring problem of system crashes every 5-10 minutes, which prevents half of the files from loading properly.

Meeting notes with Dr. Kristy:- (Aug 15, Thursday)

Dataset Retrieval & Analysis: We discussed the process of retrieving datasets from the Lely application and our attempts to establish connections between the variables within the data.

Correlation Findings: Upon reviewing the correlation map, we determined that there is no significant correlation that could reliably predict daily or periodic milk production.

Exploration of Other Factors: We considered investigating other factors, such as cow disease prediction based on relevant variables. However, due to the challenges in mapping different data files together, we decided it would be more effective to focus on one specific cause for now.

Data File Integration Challenges: We encountered difficulties when attempting to combine different data files. Each file follows a distinct template with unique fields, and there is no common primary key to link the data across templates.

Data Analysis Presentation: Kristy was shown the data analysis results, and we reviewed what the datasets are currently revealing.

Lely Application Documentation: We discussed the need to create documentation for the Lely application. This documentation will cover how to navigate the application, download data, and explain the fields within different datasets.

Final Report Submission: Kristy emphasized the importance of beginning work on the final report. This report should include all tasks we've undertaken, along with the challenges we've faced.

Meeting notes with Dr. Mario:- (Aug 29, Thursday)

File Analysis Review: We shared the analysis of all the downloaded files and the preliminary insights.

Dataset Mapping Issues: We discussed the challenge of finding a way to map different datasets together, as there is currently no common reference to sync the data files.

Mario's Workaround: Mario suggested a workaround to avoid getting stuck on the issue. He advised us to start working on the data by focusing on individual components rather than the broader problem.

Data Analysis Approach: Mario proposed that we analyze the data by focusing on individual robots and cows, making comparisons between them.

Comparison Strategy: We should base these comparisons on common factors, linking data points where possible, and then compare them based on their similarities.