**Team expectations agreement**

This document establishes our team’s purpose, key milestones, and tasks, and outlines how our team will collaborate through the various stages of this Capstone project.

**Group objective:**

We agree to collectively develop an interactive awareness tool that is web based. This tool will compute the amount of nutrients based on the user’s data input. Using the data that we will gather, integrate, analyse and train, we aim to produce the model that best fits the problem. Our findings will be communicated through the various project presentations during the course of the project and a final report will be submitted together with the github link to all notebooks and models, and the final presentation document.

Final deliverables:

1. Github repo link
2. Streamlit link + user manual??
3. Project presentation slides
4. Project report

**Team members**:

* Suellen Fletcher
* Faith Chebet Rotich
* Brilliant Kiptoo
* Joanne Siarivita

**Communication guideline**:

We have agreed to use teams as the main channel of communication and zoom to meet and discuss progress of each team members assigned tasks as we progress through the project. We agree to have a regular face to face weekly meeting on Monday before class (10-20 minutes) to check on each other’s progress and agree on best way forward.

**Timeline and milestones**:

| **Key milestone** | **Task** | **Due by** | **Who** |
| --- | --- | --- | --- |
| Problem definition and goal setting | * Define problem, * Set goals, * Set metrics for success. | 19/02/24 | ALL |
| Agreed outcome |  | 19/02/24 | ALL |
| Data gathering and integration | * Identify dataset, * Explore and clean data | 08/03/24 | ALL (Lead by Suellen) |
| Data exploration and preprocessing | * Preprocess data – missing values, outliers, noise etc, * Engineer new features that could improve model performance. | 14/03/24 | Faith & Brilliant |
| Data analysis and visualisation | * Perform EDA to gain insight into data, * Create visualisations of data patterns and relationships. | 14/03/24 | Faith & Brilliant |
| Model selection and training | * Choose model (each member will decide how many they would like to train), * Split data into training, testing and validation, * Train and fine-tune model using training data. | 12/04/24 | ALL |
| Model evaluation | * Evaluate model performance using appropriate evaluation metrics (eg. Accuracy, precision, recall, F1-score, ROC curve, etc) * Adjust model parameters and features to improve performance, if needed. | Ongoing | ALL |
| Model interpretation | * Interpret model’s predictions to understand factors driving results, * Employ techniques like feature importance analysis and model visualisation. | 22/04/24 | ALL |
| Develop web app | * Develop web app using streamlit | 22/04/24 | Joanne |
| Integrate all notebooks and models into github | * Integrate all deliverables into github repo | 22/04/24 | Joanne |
| Project presentation (Assessment) | * Develop slide deck (Pitch practise & career panel) | 22/04/24  29/04/24 (Final) | ALL |
| Documentation/Project Report (Assessment) | * Document CRISP DM process – data processing, model trained, evaluation etc * Document challenges faced during the project | 06/05/24 | ALL |