**Minutes of the Meeting of discussion about R&D project with faculty mentor**

Project title: Developing an AI/ML model to predict diabetes

Project ID: 24

Faculty mentor name: Dr. Vikas Upadhyaya

Team member names with Enrolment Number:

1. Agnishwar Raychaudhuri - BT22GDS056
2. Khushi Singh - BT22GCS089
3. Jagriti Singh - BT22GCS145
4. Geetika Agrawal - BT22GCS106

Day & Date of meeting: 31.01.2025

Discussion points:

1. Discussions with regard to gaps and challenges were done.
2. The faculty mentor has asked to submit the first draft of the literature review along with the gaps and challenges table.
3. The major challenge based after the gaps and challenges analysis was the limitation of dataset that the team had.
4. The faculty mentor introduced the idea of data synthesis and augmentation.

Actions suggested by faculty mentor and team members:

The faculty mentor has instructed the team to explore a data augmentation strategy. The process is as follows:

Baseline Evaluation: Train and evaluate ML models on the existing dataset.

Data Augmentation: Apply data augmentation techniques to the dataset.

Augmented Model Training: Train the ML model on the augmented dataset and compare its performance with the baseline.

If the performance drop does not exceed 5%, accept the result.

Final Training: Merge the original and augmented datasets and train the model on the combined data.

Student members (name with signature) present in the meeting:

1. Agnishwar Raychaudhuri
2. Khushi Singh
3. Jagriti Singh
4. Geetika Agrawal