

**Project Design Phase-I**  
**Solution Architecture**

|               |   |
|---------------|---|
| Date          | 5 October 2022  |
| Team ID       | PNT2022TMID27696  |
| Project Name  | Project - Deep Learning Fundus Image Analysis For Early Detection Of Diabetic Retinopathy |
| Maximum Marks | 4 Marks   |

**Solution Architecture:**



- ✓ Collecting the datasets of various medical tests done for patients from the hospitals .
- ✓ Feature selection – Using only the most important data and removing the unwanted features by performing dimensionality reduction .
- ✓ Applying Classification techniques like VGG16 and VGG19 algorithms.
- ✓ Model building – Create the DL model and doing testing and training on the model by providing test and train data respectively.
- ✓ Predict the output and evaluating the performance of the model.
- ✓ Deploying the model with UI with all required features.
- ✓ Providing the input data and it predicts the result.

**Solution Architecture Diagram:**

