Project Design Phase-I
Solution Architecture

Date	26 October 2022
Project Name	Detecting Parkinson's Disease using Machine Learning
Maximum Marks	4 Marks

Solution Architecture Diagram

Dataset collection

Feature Extraction
- Baseline Features
- Time-Frequency Features
- Mel Frequency Cepstral Coefficients
- Wavelet Transform Based Features
- Vocal Fold Features
- Tunable QFactor Wavelet Transform Based Features

Feature Engineering

Data Preprocessing
- Handling missing values

Feature Selection
- XGBoost Feature Importance

Model training
- Train Data
- Apply ML Algorithm for classification
- XGBoost Algorithm

Test Data

Prediction and Visualization

Best Model → Normal
→ Parkinson's Disease