## Project Design Phase-I Solution Architecture

Date	16 November 2023
Team ID	PNT2022TMID592399
Project Name	Project - Disease Prediction using Machine Learning
Maximum Marks	4 Marks

## **Solution Architecture:**

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.
- The solution architecture for a disease prediction ML project serves as a crucial link between healthcare challenges and technological resolutions. Its multifaceted goals are outlined below:
- **Problem Solving:** Identify and implement optimal technology solutions to address prevalent healthcare issues, emphasizing disease prediction as a key focus.
- <u>Communication</u>: Effectively describe the architecture's structure, characteristics, and behavior to stakeholders involved in the project, fostering a shared understanding of the technical aspects.
- Scope Definition: Clearly define features, development phases, and solution requirements specific to disease prediction, outlining the project's boundaries and objectives.
- Specification: Provide comprehensive specifications that serve as guidelines for the definition, management, and delivery of the disease prediction ML solution. This involves detailing the intricacies of data collection, preprocessing, feature extraction, machine learning models, and deployment strategies.
- By adhering to these overarching goals, the solution architecture ensures a streamlined and effective integration of machine learning technologies

into the healthcare domain, ultimately contributing to improved disease prediction and proactive healthcare management

## Diagram:



