Project Design Phase-I
Solution Architecture

Date	1 November 2023
Team ID	Team-592942
Project Name	Detecting COVID-19 From Chest X-Rays Using Deep Learning Techniques
Maximum Marks	4 Marks

Solution Architecture:

Best Tech Solution:

- The "Covid-19 Detection using Deep Learning with Chest X-rays" project aims to harness the power of deep learning algorithms to facilitate early and accurate diagnosis of Covid-19 by analyzing chest X-ray images

Behavior and Aspects:

- The software behavior is dynamic, adapting to changing data patterns. Aspects include data preprocessing, using best image preprocessing algorithms like RESNET-50, and Transfer learning..

Development Phases:

- Our application undergoes iterative development phases:
  - Data Preprocessing: Cleaning and preparing data for analysis.
  - Model Training: Using RESNET-50.
  - Evaluation: Assessing model accuracy and fine-tuning.
  - Integration: Seamlessly integrating into existing healthcare systems.

Solution Requirements:

- Key requirements include:
  - Data Quality: High-quality fetal health data.
  - Computational Resources: Adequate resources for model training.
  - Integration: Compatibility with existing healthcare infrastructure.

Solution Architecture Diagram: