Project Design Phase-I
Solution Architecture

Date	08 May 2023
Team ID	NM2023TMID19325
Project Name	Cancer Vision: Advanced Breast Cancer Prediction with Deep Learning

Solution Architecture:

Data Preprocessing: Preprocessing the collected data by cleaning and transforming it into a format suitable for deep learning. This may involve tasks such as data normalization, feature selection, and handling missing or erroneous values.

Model Training: Developing a deep learning model for breast cancer prediction using a convolutional neural network (CNN) architecture. The model should take in the preprocessed data as input and learn to classify patients as having or not having breast cancer based on their features.

Model Validation: Validating the trained model using cross-validation techniques to ensure that it can generalize well to new, unseen data. This step involves testing the model on a separate test dataset and evaluating its performance using metrics such as accuracy, precision, recall, and F1 score.

Deployment: Deploying the trained model as a web or mobile application that can take in patient data and provide predictions in real-time. This involves integrating the model with a user interface that allows healthcare providers to input patient information and receive a breast cancer prediction.

Solution Architecture Diagram: