

## Project Design Phase-I

### Solution Architecture

Date	23 October 2023
Team ID	Team-592597
Project Name	Project - Detecting COVID-19 From Chest X-Rays Using Deep Learning Techniques
Maximum Marks	4 Marks

### Solution Architecture:

**Model architecture:** This component defines the specific architecture of the CNN deep learning model. There are many different CNN architectures that can be used for COVID-19 detection, such as ResNet, VGGNet, and DenseNet.

**Model training:** This component trains the CNN deep learning model on the preprocessed data. The training process involves feeding the model batches of images and labels, and adjusting the model's parameters to minimize the loss function.

**Transfer learning:** This component extracts the features learned from a pre-trained CNN deep learning model and uses them to initialize the CNN deep learning model for the COVID-19 detection project.

**Model evaluation:** This component evaluates the performance of the trained CNN deep learning model on a held-out test set. The evaluation metrics used may include accuracy, precision, recall, and F1 score.

### Solution Architecture Diagram



