Project Design Phase-II
Technology Stack (Architecture & Stack)

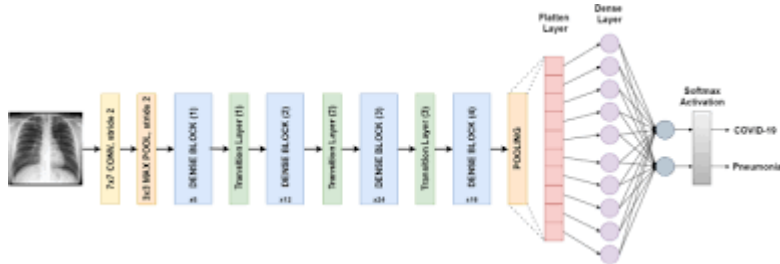| Date	11 May 2023
Team ID	NM2023TMID11342
Project Name	COVID VISION: Advanced COVID-19 Detection from lung x-ray with Machine learning or Deep learning

Technical Architecture:

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user interacts with the UI to choose an image.	HTML, CSS, JAVA SCRIPT
2.	Application Logic-1	The chosen image is processed by a Exception deep learning model.	CNN Python
3.	Application Logic-2	The exception model is integrated with a Flask application.	Python

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask	Python module
2.	Scalable Architecture	Flask UI which shares the image to the model to predict which shares back to the Flask UI for the user.	Flask which is embedded with Xception model.
3.	Performance	It can predict with accuracy of 99.5%. It is fast and secure	CNN algorithm such as DenseNet121 and transfer learning