

Project Design Phase-I
Proposed Solution Template

Date	05 May 2023
Team ID	NM2023TMID05813
Project Name	CovidVision: Advanced COVID-19 Detection from Lung X-rays with Machine Learning or Deep Learning
Maximum Marks	2 Marks

Proposed Solution for CovidVision: Advanced COVID-19 Detection from Lung X-rays with Machine Learning or Deep Learning

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The detection of COVID-19 in patients using medical images, specifically chest X-ray images. The COVID-19 pandemic has created a demand for rapid assessment and treatment of infected patients.
2.	Idea / Solution description	Using transfer learning techniques to develop a deep learning algorithm that can accurately analyze chest X-ray and CT-scan images to detect the presence of COVID-19. The algorithm can assist in the early identification and isolation of infected patients a
3.	Novelty / Uniqueness	While deep learning techniques have been applied to medical image analysis before, the use of transfer learning to fine-tune pre-trained models specifically for COVID-19 detection is relatively new and unique.
4.	Social Impact / Customer Satisfaction	This solution has the potential to be scalable and accessible, as it can be deployed in hospitals and clinics globally, particularly in areas with limited resources or a shortage of healthcare professionals. This can improve the availability of COVID-19 diagnosis and treatment, particularly in underserved communities.
5.	Business Model (Revenue Model)	The business model can be focused on providing an accessible, scalable, and reliable deep learning algorithm that can assist healthcare providers in the fight against the COVID-19 pandemic.
6.	Scalability of the Solution	It can help in the rapid and widespread deployment of the deep learning algorithm for COVID-19 detection, particularly in areas with limited resources or a shortage of healthcare professionals