12 July 2024

Project Initialization and Planning Phase

Date	12 July 2024
Team ID	SWTID1720351492
Project Name	CovidVision: Advanced COVID-19 Detection from Lung X-Rays with Deep Learning
Maximum Marks	3 Marks

Define Problem Statements (Customer Problem Statement Template):

The Covid-19 diagnosis process challenges customers, affecting their journey and overall satisfaction. Healthcare providers, particularly those in overwhelmed hospitals and rural clinics, encounter hurdles such as limited resources, high patient volumes, and lack of expert radiologists. Public health authorities also face challenges in accurately checking and responding to Covid-19 trends. These challenges lead to delays in diagnosis, ineffective patient management, and difficulty in having the virus. Enhance our services and improve customer outcomes, we aim to address these pain points. By understanding customers' specific frustrations during the diagnosis journey and implementing solutions, we can create an efficient, user-friendly experience that aligns with our customer's expectations and fosters a positive relationship with our brand.

Example:

I am (Customer)	I am trying to	But	Because	Which makes me feel
PS-1	A hospital overwhelmed by Covid-19 cases.	Diagnose and triage patients quickly and accurately.	There is a high volume of patients and limited staff.	Quick diagnosis is critical for effective triage and treatment.
PS-2	A rural clinic with limited resources.	Screen and diagnose Covid-19 cases effectively.	There is a lack of expert radiologists.	Early detection and isolation are crucial for containment.
PS-3	Public health authorities.	Monitor Covid-19 trends and distribute resources efficiently.	There is inconsistent data from various sources.	Accurate data is needed for strategic resource allocation and intervention.

Objective

The primary aim of the "Covid-19 Detection from Lung X-rays" project is to use deep learning algorithms to analyse lung X-ray images for signs of Covid-19 infection, providing accurate and rapid diagnosis to aid in early detection and containment of the virus.