

Define Problem Statement

Date	15 March 2024
Team ID	SWTID1720425899
Project Name	Covid Vision: Advanced COVID-19 Detection from Lung X-rays with Deep Learning
Maximum Marks	3 Marks

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	A radiologist at a busy hospital.	Accurately diagnose COVID-19 from lung X-rays quickly and efficiently.	The current diagnostic methods are not always reliable and often result in false positives or negatives.	These methods lack advanced analytical capabilities and cannot always differentiate between COVID-19 and other respiratory conditions.	Frustrated and concerned about the accuracy of diagnoses, leading to potential delays in patient treatment and increased workload due to re-evaluations.
PS-2	A hospital administrator responsible for integrating new technologies into clinical workflows.	Implement an effective and seamless diagnostic tool for COVID-19 detection that can be used by our medical staff without extensive training.	Many advanced technologies are difficult to integrate into existing systems and require significant resources and training.	They are often complex, lack user-friendly interfaces, and demand high computational power.	Overwhelmed by the logistical challenges and worried about the cost-effectiveness and practicality of adopting new diagnostic tools.

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PS-3	A healthcare policy maker focused on ensuring equitable healthcare access and treatment.	Ensure that COVID-19 diagnostic tools are effective across diverse populations and healthcare settings.	Current tools often fail to generalize well, leading to biased results and unequal healthcare outcomes.	They are trained on non-diverse datasets and are not adapted to different demographic and clinical contexts.	Concerned about the fairness and inclusivity of healthcare solutions, and determined to find technologies that provide accurate results for all population groups