

Project Design Phase-I
Proposed Solution Template

Date	24 September 2022
Team ID	PNT2022TMID41447
Project Name	Project – Machine Learning-based predictive analytics for aircraft engine
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Predicting the failure of an Aircraft Engine using Machine Learning to save loss of time, effort and money thus improving productivity.
2.	Idea / Solution description	<p>The failure can be detected by installing the sensors and keeping a track of the values. The failure detection and predictive maintenance can be for any device, out of which we will be dealing with the engine failure for a threshold number of days.</p> <p>Preventing the structural problems and the fuel problems such as exhaustion and contamination.</p>
3.	Novelty / Uniqueness	The engine is the heart of the aircraft where it converts energy from the fuel to mechanical energy by creating motion in the process.
4.	Social Impact / Customer Satisfaction	The Safety and Security plays a major role in Social impact. The customer expects for the Timeliness, Comfort and Convenience.
5.	Business Model (Revenue Model)	The emerging forms of business model in the airline industry are presented in terms of how the carrier generates revenue and its product offering.
6.	Scalability of the Solution	This proposed solution is very scalable. i.e., Adding new features to enhance our engine to work without any difficulty and increasing the safety.