Project Initialization and Planning Phase

Date	23 June 2025
Team ID	SWUID20250176209
Project Name	Machine Learning Approach for Employee Performance Prediction
Maximum Marks	3 Marks

Define Problem Statements (Customer Problem Statement Template):
Garment manufacturing units often face challenges in accurately predicting worker productivity, which is crucial for planning daily operations, managing timelines, and allocating resources efficiently. Traditional methods rely on manual judgment or limited past performance data, making them prone to errors and inconsistencies. This project addresses the issue by developing a machine learning model that analyzes key production-related metrics—such as SMV, overtime, idle time, and departmental inputs—to forecast actual productivity. This enables HR and factory managers to make data-driven decisions, reduce delays, and improve overall workforce efficiency.

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	HR or Manager	Assess employee performance accurately	Manual evaluations are inconsistent and time-consuming	I need to make data-driven decisions	Certain about performance outcomes