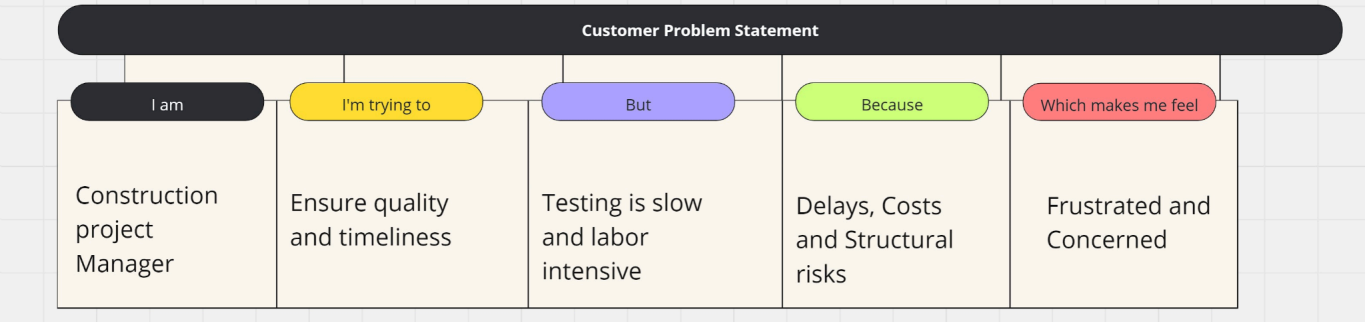
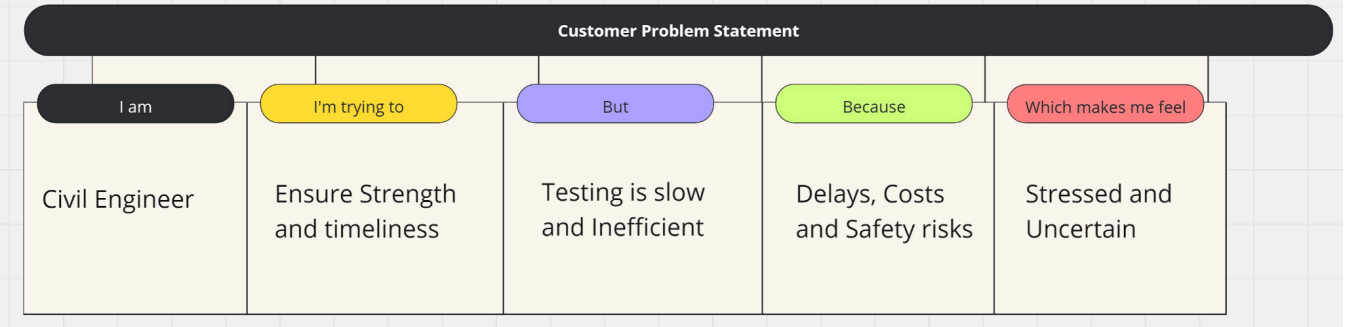
Project Initialization and Planning Phase

Date	07 July 2024
Team ID	SWTID1720160264
Project Name	Predicting Compressive Strength Of Concrete Using Machine Learning
Maximum Marks	3 Marks

Define Problem Statements (Customer Problem Statement Template):

In the construction industry,ensuring the quality and durability of concrete structures is paramount.One of the most critical parameters that determine the quality of concrete is its compressive strength. Customers,including construction companies,civil engineers, and quality control laboratories, face several challenges related to the compressive strength of concrete.Customers face issues with inconsistent concrete quality,time-consuming and labor-intensive testing, and high costs related to equipment,compliance and data management. Delays in obtaining results and poor predictive insights lead to project delays,increased costs, and structural failures. Inefficient processes result in environmental impact and customer dissatisfaction. By addressing these pain points,solutions can be developed to enhance the efficiency,accuracy and reliability of compressive strength testing, ultimately leading to better project outcomes and customer satisfaction.





Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	A Construction project Manager	Ensure quality and timeliness	Testing is slow and labor intensive	Delays, Costs and Structural risks	Frustrated and Concerned
PS-2	Civil Engineer	Ensure Strength and timeliness	Testing methods are inefficient and time consuming	Delays, Costs, Safety risks	Stressed and Uncertain