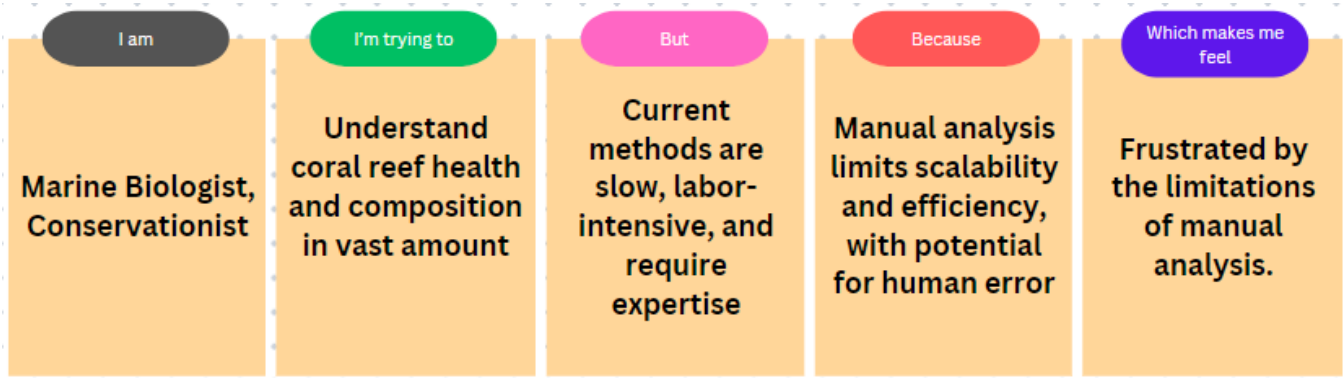
Project Initialization and Planning Phase

Date	07 july 2024
Team ID	SWTID1720084639
Project Name	**Beneath The Waves: Unraveling Coral Mysteries Through Deep Learning**
Maximum Marks	3 Marks

Define Problem Statements (Customer Problem Statement Template):

Coral reefs are vital marine ecosystems facing rapid decline. Manual analysis of underwater imagery for coral health assessment is slow, expensive, and requires expertise, limiting large-scale monitoring. This project aims to develop a deep learning-based solution to **automate coral reef analysis**, enabling researchers and conservationists to efficiently assess reef health, identify coral species, and track threats, ultimately contributing to more effective conservation strategies.



Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	Marine Biologist, Conservationist. Understand the health and composition of coral reefs.	Analyze vast amounts of underwater imagery to identify coral species, track reef health, and monitor threats.	Current methods are time-consuming, labor-intensive, and require expert knowledge.	Manual analysis involves tedious image classification and limited scalability for large datasets.	Frustrated by the inefficiency and potential for human error in manual analysis.