

Project Initialization and Planning Phase

Date	15 April 2024
Team ID	Team-738165
Project Name	Neural Network Ahoy Cutting-edge ship classification for Maritime Mastery
Maximum Marks	3 Marks

Define Problem Statements (Customer Problem Statement Template):

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The maritime sector is enormous and includes a wide variety of ship types, each intended for a particular function, such as cargo transportation or naval defence. For maritime operations, such as navigation, port management, and security, ships must be classified effectively.

Conventional classification techniques frequently depend on challenging manual inspection or simplistic feature extraction, which results in errors and inefficiencies. There is an urgent need for an advanced ship classification system that makes use of cutting-edge technology to address these issues. Using neural networks and artificial intelligence (AI), the Neural Network Ahoy project seeks to transform ship classification.

Customer Problem Statement Template				
I am	I'm trying to	But	Because	Which makes me feel
<div>Marine time administration</div>	<div>Classify the ship to ensure the safety and seaworthiness of the ship, to maintain marine environmental protection, and to regulate international trade and navigation</div>	<div>Faced with the challenge of limited resources and manpower, as well as the need to keep up with the latest technological advancements in the shipping industry</div>	<div>The classification process involves a thorough inspection of the ship's structure, machinery, equipment, and safety systems, which can be time-consuming and expensive</div>	<div>Overwhelmed by the responsibility and the need to balance safety, environmental protection, and economic considerations in the classification process</div>
<div>Navy</div>	<div>Classify the ship to ensure the safety and security of the ship, to maintain the readiness and effectiveness of naval forces, and to regulate naval operations</div>	<div>Faced with the challenge of rapidly evolving naval technology and the need to maintain operational secrecy</div>	<div>The classification process involves a thorough inspection of the ship's design, construction, and operational capabilities, which can be complex and sensitive</div>	<div>Concerned about the potential risks and threats posed by unclassified or improperly classified ships, and the need to balance operational security with transparency and accountability</div>

Reference: https://miro.com/app/board/uXjVKTMB1Fo=?share_link_id=237689971319

Example:

Problem Statement (PS)	A maritime Administration	I'm trying to	But	Because	Which makes me feel
PS-1	Maritime Administration	Classify the ship (reason: to ensure the safety and seaworthiness of the ship, to maintain marine environmental protection, and to regulate international trade and navigation)	Faced with the challenge of limited resources and manpower, as well as the need to keep up with the latest technological advancements in the shipping industry	The classification process involves thorough inspection of the ship's structure, machinery, equipment, and safety systems, which can be time-consuming and expensive	Overwhelmed by the responsibility and the need to balance safety, environmental protection, and economic considerations in the classification process
PS-2	Navy	Classify the ship to ensure the safety and security of the ship, to maintain the readiness and effectiveness of naval forces, and to regulate naval operations	Faced with the challenge of rapidly evolving naval technology and the need to maintain operational secrecy	The classification process involves a thorough inspection of the ship's design, construction, and operational capabilities, which can be complex and sensitive	The classification process involves a thorough inspection of the ship's design, construction, and operational capabilities, which can be complex and sensitive