Data Collection and Preprocessing Phase

Date	20 April 2024
Team ID	738171
Project Title	Neural Networks Ahoy: Cutting-Edge Ship Classification for Maritime Mastery
Maximum Marks	2 Marks

Data Collection Plan & Raw Data Sources Identification Template

In the endeavor to develop cutting-edge ship classification models for maritime mastery, meticulous data curation and integrity play pivotal roles. The project "Neural Networks Ahoy: Cutting-Edge Ship Classification for Maritime Mastery" is driven by the objective to identify various types of ships with unparalleled accuracy, leveraging deep learning techniques. To achieve this, a robust data strategy, encapsulated by the Data Collection Plan and Raw Data Sources report, is imperative. These components ensure that every facet of data acquisition, integration, and management is meticulously orchestrated to empower informed decision-making in every analysis and decision-making endeavor.

Data Collection Plan Template

Section	Description
Project Overview	"Neural Networks Ahoy" aims to revolutionize ship classification using deep learning. By leveraging the VGG16 model, pretrained on diverse data, the project enhances maritime traffic monitoring and coastal defense. With transfer learning, the model categorizes ships into Cargo, Carrier, Military, Cruise, and Tankers. Data organization is facilitated by a train.csv file, and model deployment is achieved through Flask. Ultimately, the project seeks to develop a reliable ship classification system for real-time maritime safety and

	security.
Data Collection Plan	Kaggle (https://www.kaggle.com/code/abdullahhaxsh/ship-classifier-using-cnn/input)
Raw Data Sources Identified	Dataset :- Game of Deep Learning: Ship dataset : Train Folder Train Folder:- Contain 1 tain.csv file and images folder sample_submission_ns2btK.csv test_ApKoW4T.csv

Raw Data Sources Template

Source Name	Description	Location/URL	Format	Size	Access Permissions
Dataset 1	Game of Deep Learning: Ship dataset download through kaggle it contains Train Folder, sample_submission_ns2btK.csv,test_ApKoW4T.csv Train Folder:- Contain 1 tain.csv	https://www.kaggle.com/code/abdullahhaxsh/ship-classifier-using-cnn/input	Folder	83.85 MB	Public

	file and images folder				