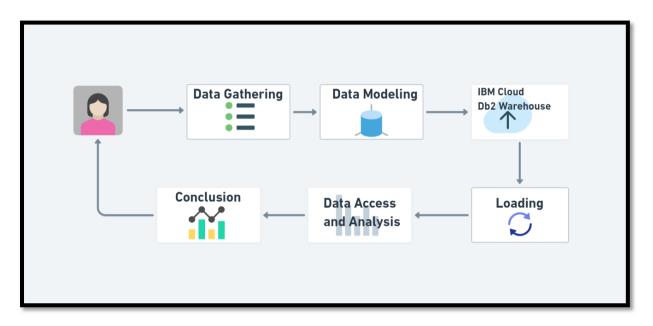
# **Project 7: Data Warehousing with IBM Cloud Db2 Warehouse**

# **Phase 2: Innovation**

#### **Work Flow**



#### **DESCRIPTION OF EACH STEP**

# **Step 1: Define Project Goals and Scope.**

The aim of this project is to create a comprehensive and effective system for analysing security factors at the port, tracking boat entries and exits, and distinguishing licensed from unlicensed boats. This approach focuses on data quality, real-time monitoring, collaboration, and continuous improvement to strengthen port security.

#### **Step 2: Data Gathering and Integration**

We are going to use Excel data for our project which include the information and detail of each boat and other factors.

For implementation we are going to using IBM DataStage to extract, transform, and load (ETL) the data into a structured format suitable for analysis which is a powerful ETL tool that can help you with data integration.

## **Step 3: Data Modelling**

Creating a data model that represents the structure of our data warehouse by involving tables, relationships, and attributes.

We are going to use IBM Data Architect tool which will provide assist in data modelling.

## Step 4: Setting Up IBM Cloud Db2 Warehouse

Configuring our database instance, including setting up security, scalability, and performance options.

# **Step 5: Data Loading**

To Load the transformed data into your IBM Db2 Warehouse instance. We will be using IBM DataStage for this purpose.

Ensuring data quality and consistency during the loading process

#### **Step 6: Data Access and Analysis**

Analysis using IBM Watson Studio tool by build dashboards, reports, and data analysis pipelines to empower your data architects and analysts.

Utilize the capabilities of Db2 Warehouse, such as its in-database analytics and machine learning features, to perform advanced analyses.

## **Step 6: Conclusion**

Evaluate the effectiveness of your data warehouse in meeting your project objectives will be our main goal by identify areas for improvement and enhancement working over the same until get the expected output.