

**DATA WAREHOUSE &DATA MINING**

**LOGISTICS MANAGEMENT**

**PROJECT CONTRIBUTORS:**

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**SUBMITTED TO:**

* MAM NUSRAT SHAHEEN

**SUBMITTED DATE:**

JUNE 6, 2022

**ERD:**

Diagram

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**DIMENSIONAL MODELLING:**

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**SQL SCIPRT:**

CREATE TABLE dimAddress

(

Address\_ID INT NOT NULL,

Address\_Details VARCHAR(100) NOT NULL,

PRIMARY KEY (Address\_ID)

);

CREATE TABLE dimRef\_Calendar

(

Day\_date DATE NOT NULL,

Day\_number INT NOT NULL,

PRIMARY KEY (Day\_date)

);

CREATE TABLE dimCustomers

(

Customer\_ID INT NOT NULL,

Customer\_Details VARCHAR(50) NOT NULL,

PRIMARY KEY (Customer\_ID)

);

CREATE TABLE dimLocation

(

Location\_ID INT NOT NULL,

Location\_Details INT NOT NULL,

PRIMARY KEY (Location\_ID)

);

CREATE TABLE dimOrders

(

Order\_ID INT NOT NULL,

Order\_Details VARCHAR(100) NOT NULL,

Customer\_ID INT NOT NULL,

PRIMARY KEY (Order\_ID)

);

CREATE TABLE dimProducts

(

Product\_ID INT NOT NULL,

Product\_Details VARCHAR(100) NOT NULL,

PRIMARY KEY (Product\_ID)

);

CREATE TABLE dimShipment

(

Shipment\_ID INT NOT NULL,

Shipment\_Details VARCHAR(100) NOT NULL,

PRIMARY KEY (Shipment\_ID)

);

CREATE TABLE dimShipment\_Leg

(

Leg\_ID INT NOT NULL,

Shipment\_ID INT NOT NULL,

start\_leg\_location VARCHAR(50) NOT NULL,

end\_leg\_location VARCHAR(50) NOT NULL,

document\_type\_code VARCHAR(20) NOT NULL,

document\_type\_description VARCHAR(50) NOT NULL,

PRIMARY KEY (Leg\_ID)

);

CREATE TABLE Fact\_Logistics

(

Fact\_ID INT NOT NULL,

Average INT NOT NULL,

Address\_ID INT NOT NULL,

Reporting\_Date DATE NOT NULL,

Customer\_ID INT NOT NULL,

Location\_ID INT NOT NULL,

Order\_ID INT NOT NULL,

Product\_ID INT NOT NULL,

Shipment\_ID INT NOT NULL,

Leg\_ID INT NOT NULL,

PRIMARY KEY (Fact\_ID),

FOREIGN KEY (Address\_ID) REFERENCES dimAddress(Address\_ID),

FOREIGN KEY (Reporting\_Date) REFERENCES dimRef\_Calendar(Day\_date),

FOREIGN KEY (Customer\_ID) REFERENCES dimCustomers(Customer\_ID),

FOREIGN KEY (Location\_ID) REFERENCES dimLocation(Location\_ID),

FOREIGN KEY (Order\_ID) REFERENCES dimOrders(Order\_ID),

FOREIGN KEY (Product\_ID) REFERENCES dimProducts(Product\_ID),

FOREIGN KEY (Shipment\_ID) REFERENCES dimShipment(Shipment\_ID),

FOREIGN KEY (Leg\_ID) REFERENCES dimShipment\_Leg(Leg\_ID)

);

**SCREENSHOTS OF ETL:**

**Diagram

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**Graphical user interface, text, email

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**Diagram

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**Graphical user interface

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**Diagram

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**Graphical user interface, text, email

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**Graphical user interface

Description automatically generated**

**Graphical user interface, diagram

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**Graphical user interface

Description automatically generated**

**Graphical user interface, table

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**Graphical user interface, diagram, application

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**Graphical user interface

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**Graphical user interface, table

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**Graphical user interface, table

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**BUSSINESS RULES & THEIR RESULTS:**

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**Graphical user interface, application

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**Graphical user interface, application

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**Graphical user interface, application, Word

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**Table

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**APPLYING NAÏVE BAYES MACHINE LEARNING MODEL:**

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Text

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Graphical user interface, text

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