

# **DATABASE MANAGEMENT SYSTEM**

UE19CS301

**Team - 24**

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## **PROBLEM STATEMENT:**

The below ER Diagram represents the model of courier management system. The courier management shows visual of database tables and the relationship between customer, Manager, Courier, Admin etc. It uses structured data to define the relationship between structured data group.

## **COURIER MANAGEMENT SYSTEM ENTITIES AND ATTRIBUTES:**

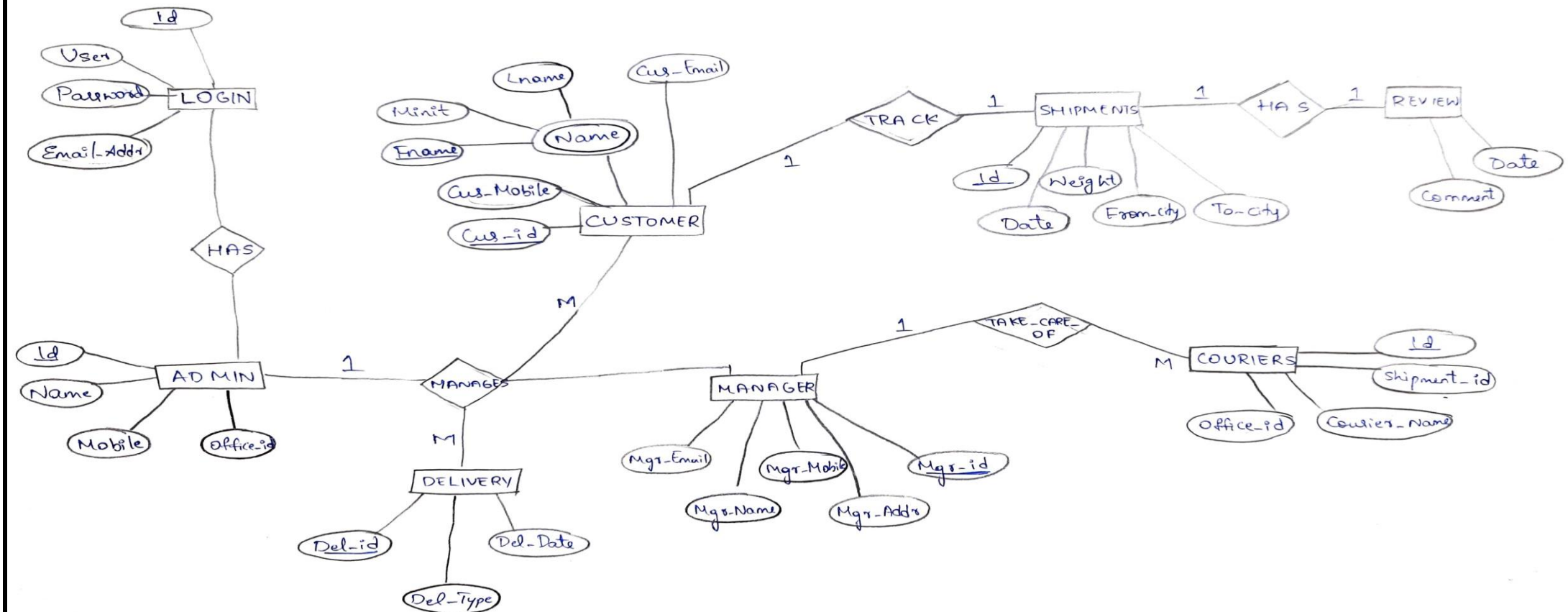
- **Courier Entity:** Attributes of courier are ID, Shipment\_Id, Courier\_Name and Office\_Id
- **Customer Entity:** Attributes of customer are cus\_id, cus\_mobile, Fname, Minit, Lname and cus\_email
- **Manager Entity:** Mgr\_id, Mgr\_mobile, Mgr\_addr, Mgr\_name and Mgr\_email
- **Shipment Entity:** Id, weight, date, from\_city, to\_city
- **Delivery Entity:** Del\_Id, Del\_Type and Del\_date

## A LITTLE DESCRIPTION OF COURIER MANAGEMENT

- Each entity contains primary key and unique keys.
- The entity shipment has binded with courier, customer entities with foreign key
- There is one-to-one and one-to-many relationship available between shipment, manager, delivery
- The details of courier are store into the courier table respective with all tables.

## CONCEPTUAL MODEL OF DATABASE DESIGN:

### ENTITY - RELATIONSHIP DIAGRAM



### **ER TOOL USED:**

The ER Tool used to recreate the final ER diagram is ERD Plus. It is a Web-based database modelling tool that offers relational schemas, SQL generation, data export, ER diagram conversion and more. ERDPlus quickly and easily creates Entity Relation Diagrams. ERD Plus is drag-and-drop tool, but it's very simple from a UI perspective.

### **Advantages:**

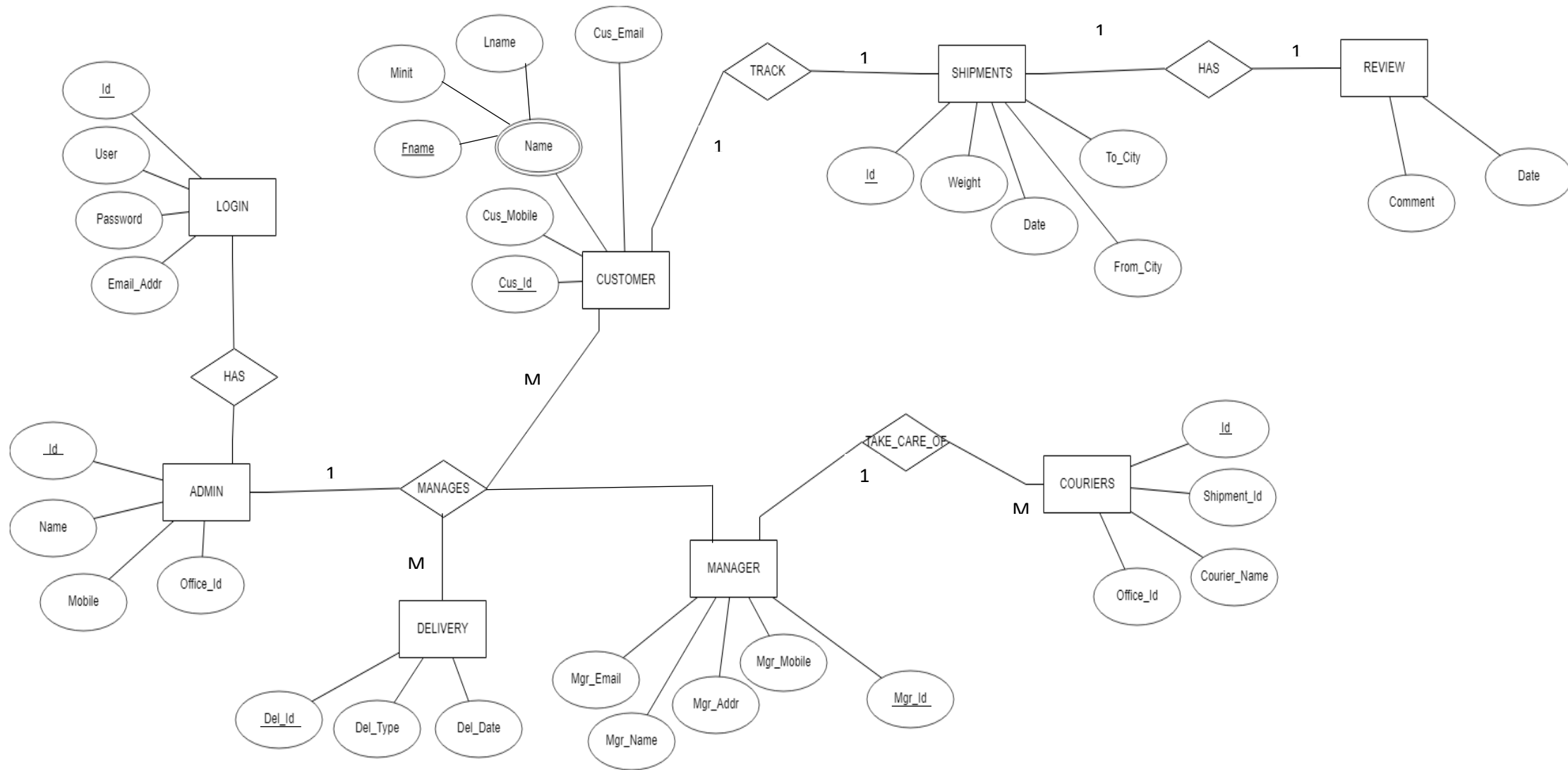
- 1) The tool has a simple UI which is easy to use.
- 2) The tool has all the shapes required to denote each & every item which is to be depicted in an entity relationship diagram. The associations and relationships can be easily draw between two entities.
- 3) Free of cost, open source and can be used immediately with just a simple added step of account creation.

Reference link: <https://erdplus.com/>

### **INSTALLATION STEPS:**

- Visit the installer website of ERD Plus application
- Click on download in downloads tab.
- Download the version supported for the system.
- After downloading install in the system.

## ENTITY-RELATIONSHIP DIAGRAM:



**CONTRIBUTIONS:**

Divyanshu Sharma : Collecting information and forming relations and relevant attributes for each tuple. Transferring final ER to soft copy using ERDPlus tool

Navya.C: Establishing constraints on attributes and relationships between tuples. Hand drawn ER diagram.