Abstract

Digital Inventory Tool is an inventory management system. Here in this project we have tried to build the whole system for a shop. Only the admins and employees assigned to access the tool can login and places the orders for customers. They can also add or delete products as well as entry the customers information. The owner and admins can easily go through their customers details and product details. They can also manipulate it if they want. Only admins can assign new employees. This system is being built to bring efficiency to the store management and fasten the customer servies.

In this project we have used JAVA (jdk-16.0.2) language along with an open-source Java-based framework, JavaFX. JavaFX is used to design our interface and UI. For managing data we have used a relational database management system (RDBMS). In this project we have used Microsoft SQL Server 2019.

Objective

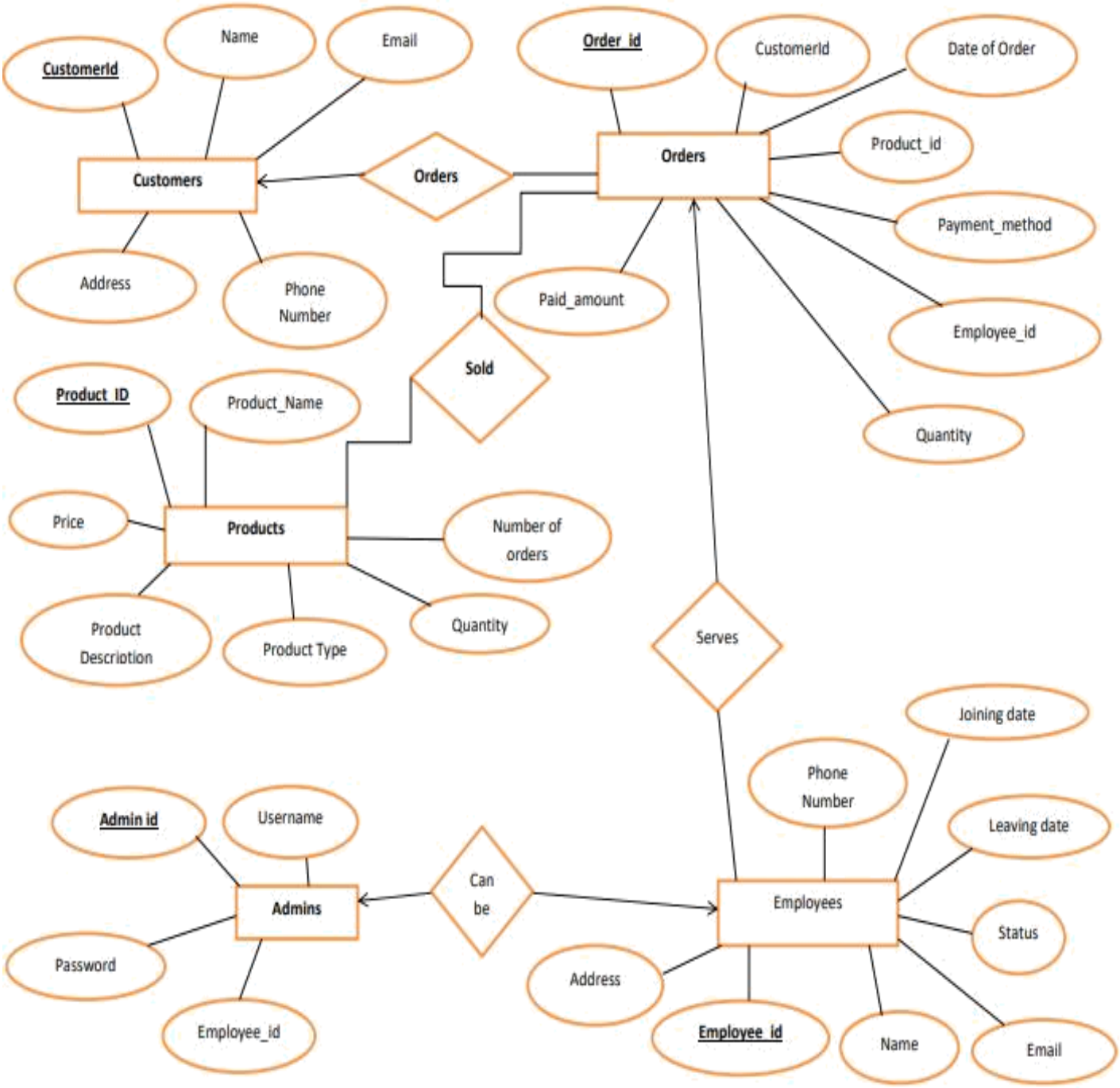
We will analyze the project scenario and find out all the possible entities, relationships, and attributes. Then we will make a ER Diagram alongside with Relational Schema. Cardinality relationships will be made sure and premises will be given hereby.

Project Scenario

When a customer comes to the store after choosing his/her desired items he can place the order and by a matter of time he / she can leave the store .The employees are assigned to access the tool can place their orders , they also have to entry their ids' then they can place the order. After that the quantity amount of the products of the store will be updated automatically and also the new products or any kind of update can be made in the system . Only authorized employees can do it .

Analysing Project Scenario

Possible Entity	Possible Relationship	Possible Attributes
1.Customers 2.Products 3.Employees 4.Orders 5.Admins	Customer **places** an order Products are **Sold** to orders Employees **Served** the order Admins **can be** Employees	**1.Customers** ID Name Email Address Phone Number **2.Products** Product Id Name Price Description Product Type Quantity Number of orders **3.Employees** Employee Id Name Email Address Phone Number Joining Date Leaving Date **4.Orders** Order Id Customer Id Date of Order Payment method Employee id Quantity Paid Amount Product id **5.Admins** Admin Id Username Password Employee id


CustomerId
Name
Email
Customers
Address
Phone Number
Orders
Order_id
CustomerId
Date of Order
Product_id
Payment_method
Employee_id
Quantity
Orders
Paid_amount
Sold
Product_ID
Product_Name
Price
Products
Number of orders
Product Description
Product Type
Quantity
Serves
Joining date
Phone Number
Leaving date
Status
Employees
Address
Employee_id
Name
Email
Admin id
Username
Admins
Password
Employee_id
Can be

Key Features

1. Easy to understand & User friendly UI design
2. Admins and owner can easily manipulate data.
3. Customers information can be stored alongside with the amount of order they made.
4. By limiting accessing the tool we ensured the security of the system.