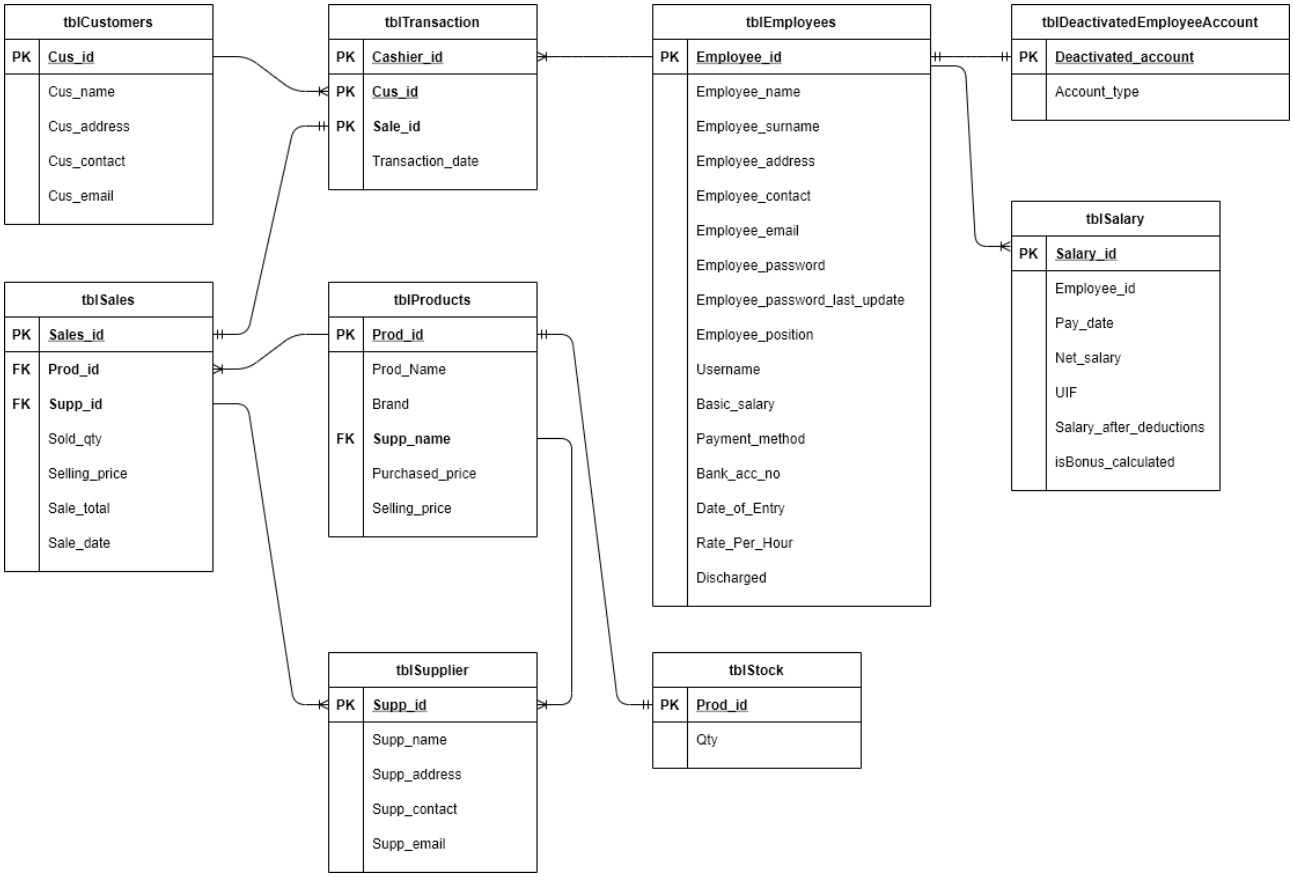
Database Entity Relationship Diagram



Database Entities

- **Customer table –** this table stores details of Reyavaya Technologies customers

```
CREATE TABLE `tblcustomers` (
  `Cus_id` int(11) NOT NULL AUTO_INCREMENT,
  `Cus_Name` varchar(55) NOT NULL,
  `Cus_address` varchar(255) NOT NULL,
  `Cus_contact` varchar(10) NOT NULL,
  `Cus_email` varchar(55) NOT NULL,
  PRIMARY KEY (`Cus_id`),
  UNIQUE KEY `Cus_Name` (`Cus_Name`),
  UNIQUE KEY `Cus_address` (`Cus_address`)
) ENGINE=InnoDB AUTO_INCREMENT=21 DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
```

- **Employee table** - this table stores employee details of the store

```
CREATE TABLE `tblemployees` (
  `Employee_id` smallint(6) NOT NULL AUTO_INCREMENT,
  `Employee_name` varchar(55) NOT NULL,
  `Employee_address` varchar(255) NOT NULL,
  `Employee_contact` varchar(10) NOT NULL,
  `Employee_email` varchar(55) NOT NULL,
  `Employee_password` varchar(55) NOT NULL,
  `Employee_password_last_update` datetime NOT NULL,
  `Employee_position` varchar(45) NOT NULL,
  `Username` varchar(55) NOT NULL,
  `Employee_surname` varchar(255) NOT NULL,
  `Basic_salary` decimal(10,0) NOT NULL,
  `Payment_method` varchar(10) NOT NULL,
  `Bank_acc_no` varchar(55) NOT NULL,
  `Date_of_Entry` date NOT NULL,
  `Rate_Per_Hour` decimal(10,0) NOT NULL,
  `Discharged` tinyint(4) NOT NULL,
  PRIMARY KEY (`Employee_id`)
) ENGINE=InnoDB AUTO_INCREMENT=45 DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
```

- **Deactivated Employee Account –** this tables stores references to deactivated employees accounts.

```
CREATE TABLE `tbldeactivatedemployeeaccount` (
  `Deactivated_account` smallint(6) NOT NULL,
  `Account_type` varchar(45) NOT NULL,
  PRIMARY KEY (`Deactivated_account`),
  CONSTRAINT `fk_DeactivatedEmployee` FOREIGN KEY (`Deactivated_account`) REFERENCES `tblemployees` (`employee_id`
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
```

- **Salary –** this table stores salary payments of employees. A record is kept each time an employee is paid.

```
CREATE TABLE `tblsalary` (
  `Salary_id` int(11) NOT NULL AUTO_INCREMENT,
  `Employee_id` smallint(6) NOT NULL,
  `Pay_date` date NOT NULL,
  `Net_salary` decimal(10,0) NOT NULL,
  `UIF` decimal(10,0) NOT NULL,
  `Salary_after_deductions` decimal(10,0) NOT NULL,
  `isBonus_calculated` tinyint(4) NOT NULL,
  PRIMARY KEY (`Salary_id`),
  KEY `fk_EmployeePayment` (`Employee_id`),
  CONSTRAINT `fk_EmployeePayment` FOREIGN KEY (`Employee_id`) REFERENCES `tblemployees` (`employee_id`)
) ENGINE=InnoDB AUTO_INCREMENT=2 DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
```

- **Supplier –** this table stores details of products suppliers.

```
CREATE TABLE `tblsupplier` (
  `Supp_id` int(11) NOT NULL AUTO_INCREMENT,
  `Supp_name` varchar(55) NOT NULL,
  `Supp_address` varchar(255) NOT NULL,
  `Supp_contact` varchar(10) NOT NULL,
  `Supp_email` varchar(55) NOT NULL,
  PRIMARY KEY (`Supp_id`),
  UNIQUE KEY `Supp_name` (`Supp_name`)
) ENGINE=InnoDB AUTO_INCREMENT=22 DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
```

- **Products –** this table stores details of all the products sold in the store.

```
CREATE TABLE `tblproducts` (
  `Prod_id` int(11) NOT NULL AUTO_INCREMENT,
  `Prod_Name` varchar(55) NOT NULL,
  `Brand` varchar(255) NOT NULL,
  `Supp_name` int(11) NOT NULL,
  `Purchased_price` decimal(10,0) NOT NULL,
  `Selling_price` decimal(10,0) NOT NULL,
  PRIMARY KEY (`Prod_id`),
  UNIQUE KEY `Prod_Name` (`Prod_Name`),
  UNIQUE KEY `Brand` (`Brand`),
  KEY `fk_Product_supplied_by` (`Supp_name`),
  CONSTRAINT `fk_Product_supplied_by` FOREIGN KEY (`Supp_name`) REFERENCES `tblsupplier` (`supp_id`)
) ENGINE=InnoDB AUTO_INCREMENT=40 DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
```

- **Stock –** this table stores available product stock..

```
CREATE TABLE `tblstock` (
  `Prod_id` int(11) NOT NULL,
  `Qty` smallint(6) NOT NULL,
  PRIMARY KEY (`Prod_id`),
  CONSTRAINT `fk_Product_stock` FOREIGN KEY (`Prod_id`) REFERENCES `tblproducts` (`prod_id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
```

- **Sales –** this table stores product sales. This table's data is generated from the system.

```
CREATE TABLE `tblsales` (
  `Sale_id` int(11) NOT NULL,
  `Prod_id` int(11) NOT NULL,
  `Supp_id` int(11) NOT NULL,
  `Sold_qty` smallint(6) NOT NULL,
  `Selling_price` decimal(10,0) NOT NULL,
  `Sale_Total` decimal(10,0) NOT NULL,
  `Sale_Date` datetime NOT NULL,
  PRIMARY KEY (`Sale_id`),
  KEY `fk_SoldProduct` (`Prod_id`),
  KEY `fk_SoldProductSupplier` (`Supp_id`),
  CONSTRAINT `fk_SoldProduct` FOREIGN KEY (`Prod_id`) REFERENCES `tblproducts` (`prod_id`),
  CONSTRAINT `fk_SoldProductSupplier` FOREIGN KEY (`Supp_id`) REFERENCES `tblsupplier` (`supp_id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
```

- **Transaction –** this table stores a record of each transaction made in the system.

```
CREATE TABLE `tbltransaction` (
  `Cashier_id` smallint(6) NOT NULL,
  `Cus_id` int(11) NOT NULL,
  `Sale_id` int(11) NOT NULL,
  `Transaction_date` date NOT NULL,
  PRIMARY KEY (`Cashier_id`,`Cus_id`,`Sale_id`),
  KEY `fk_Transacting_customer` (`Cus_id`),
  KEY `fk_Transaction_sale_idx` (`Sale_id`),
  CONSTRAINT `fk_Handled_by_cashier` FOREIGN KEY (`Cashier_id`) REFERENCES `tblemployees` (`Employee_id`),
  CONSTRAINT `fk_Transacting_customer` FOREIGN KEY (`Cus_id`) REFERENCES `tblcustomers` (`cus_id`),
  CONSTRAINT `fk_Transaction_sale` FOREIGN KEY (`Sale_id`) REFERENCES `tblsales` (`sale_id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
```