This database was designed to manage a small photography equipment rental business. The system keeps track of customers, equipment, reservations, and payments.

First i looked up different rental companies to see how their websites are laid out and what kind of options they have. Then I checked out the process of rentals to conclude which entities I would need and the attributes. After I looked through the websites for some equipment's to add to my project.

2. System Design Requirements

- Customer Management – Store customer details such as name, email, and phone.

- Equipment Management – Track rental equipment with daily rates and availability status.

- Reservations – Allow customers to reserve equipment for a specific date range, with total cost recorded.

- Payments – Record payments linked to reservations, including amount and method.

- Data Integrity – Use foreign keys to maintain valid relationships between customers, equipment, reservations, and payments.

3. Database Structure

1. **Customers Table**

   o Holds customer information.

   o CustomerID, Name, Email, Phone.

2. **Equipment Table**

   o Stores rental equipment details.

   o EquipmentID, Name, DailyRate, Status.

3. **Reservations Table**

   o Connects customers with equipment over a rental period.

   o ReservationID, CustomerID, EquipmentID, StartDate, EndDate, TotalCost.

   o Linked to both Customers and Equipment.

4. **Payments Table**

   o Tracks payments for reservations.

- o   PaymentID, ReservationID, Amount, Method.

- o   Linked to Reservations.