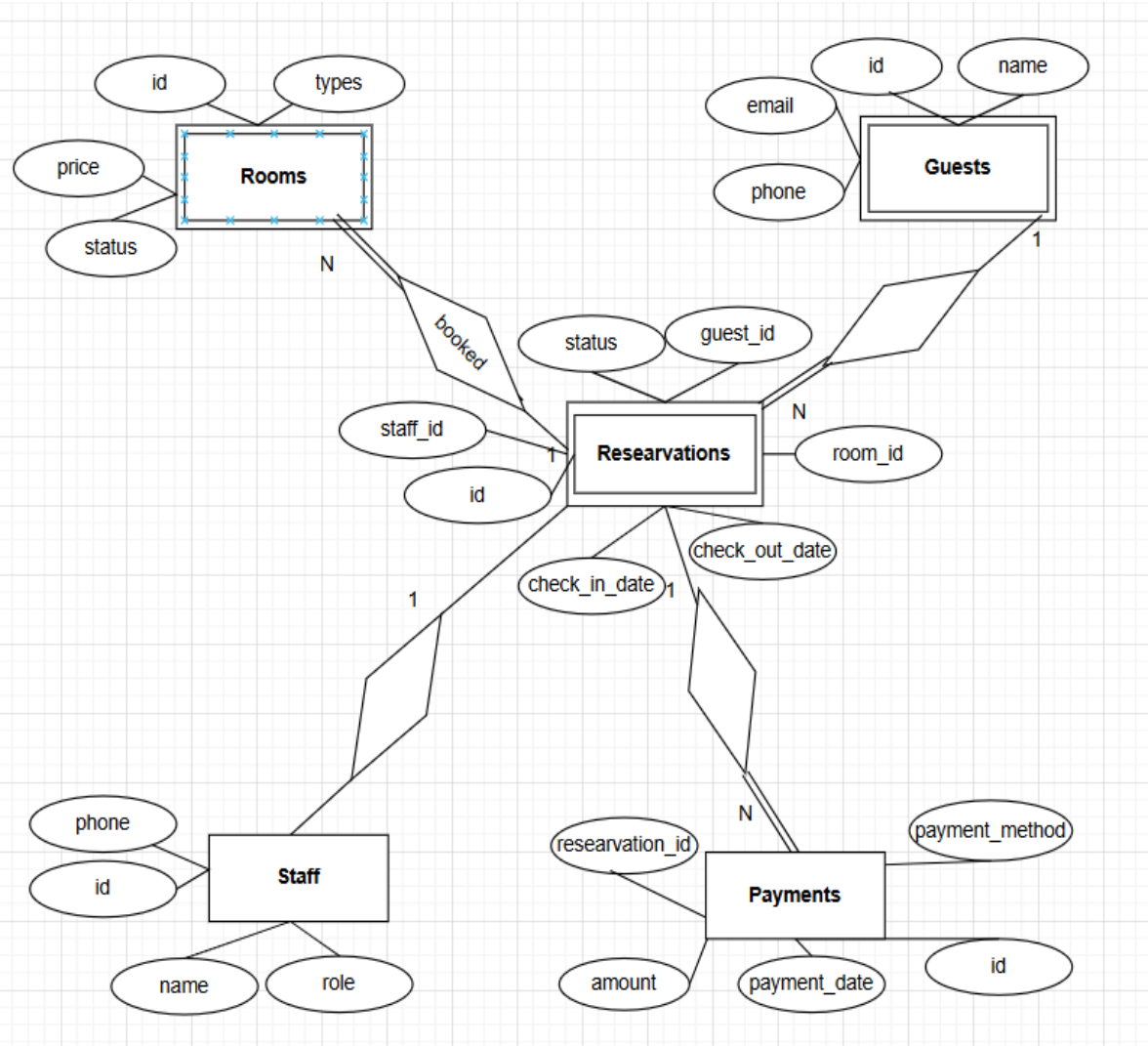
Introduction:

Designing a relational database for a hotel booking system involves creating tables to store data about rooms, guests, reservations, payments, and staff, and defining relationships between these tables.

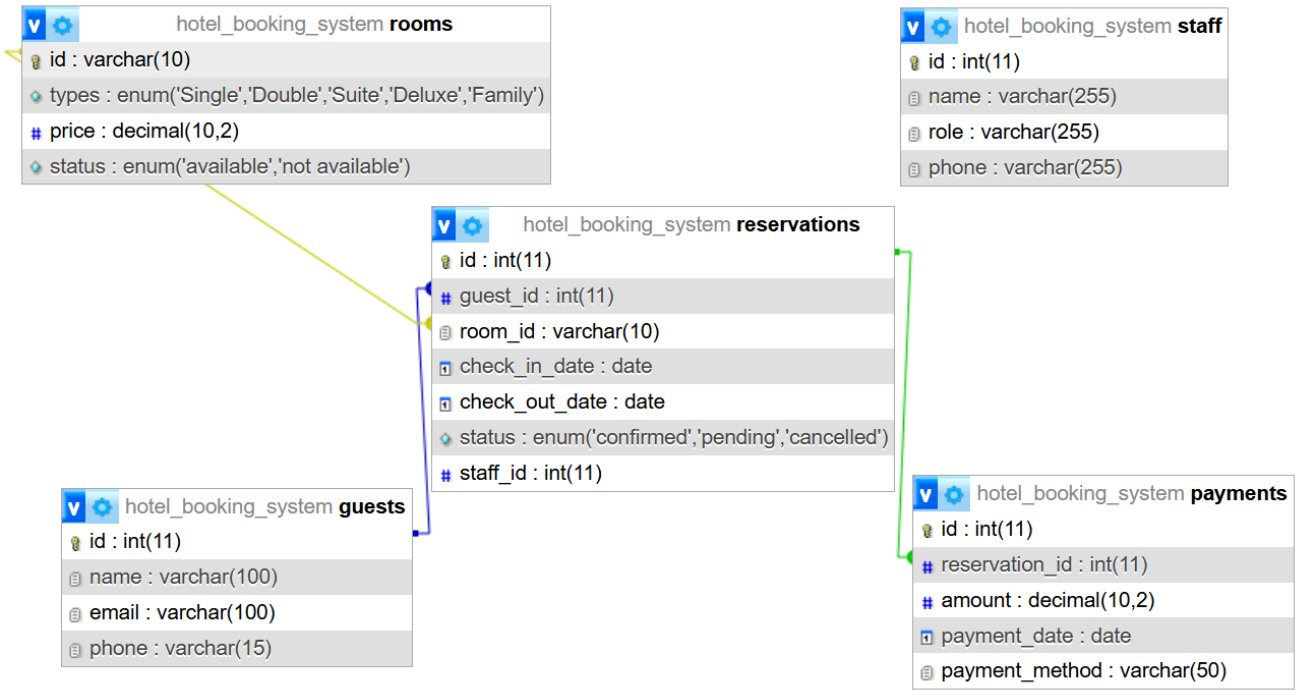
Entities used for these database:

- Guests
- Rooms
- Reservations
- Staff
- Payments

Entity relationship (ER) diagram :



Here's the Design view:



Codes used in the process:

```
CREATE TABLE guests(
  id int(11) primary key auto_increment,
  name varchar(100) NOT NULL,
  email varchar(100) NOT NULL,
  phone varchar(15) NOT NULL
) ;

CREATE TABLE payments (
  d int primary key auto_increment,
  reservation_id int(11) NOT NULL,
  amount decimal(10,2) NOT NULL,
  payment_date date DEFAULT NULL,
  payment_method varchar(50) NOT NULL
) ;
```

```
CREATE TABLE reservations(
  id int primary key auto_increment,
  guest_id int(11) DEFAULT NULL,
  room_id varchar(10) NOT NULL,
  check_in_date date DEFAULT NULL,
  check_out_date date DEFAULT NULL,
  status enum('confirmed','pending','cancelled') DEFAULT NULL,
  FOREIGN key (guest_id) REFERENCES guests(id),
  FOREIGN key (room_id) REFERENCES rooms(id)
) ;

CREATE TABLE rooms(
  id int primary key auto_increment,
  types enum('Single','Double','Suite','Deluxe','Family') DEFAULT NULL,
  price decimal(10,2) NOT NULL,
  status enum('available','not available') DEFAULT NULL
);

CREATE TABLE staff(
  id int(11) primary key auto_increment,
  name varchar(255) NOT NULL,
  role varchar(255) NOT NULL,
  phone varchar(255) NOT NULL

);
```