****Assignment****

**Roll : No : 22SW040 --> Section : 01**

**Entities**

|  |  |
| --- | --- |
| Entity | Attributes |
| Airplane | model\_number, registration\_number, capacity |
| Flight | flight\_number, departure\_airport, destination\_airport, departure\_date\_time, arrival\_date\_time, airplane\_id |
| Passenger | given\_names, surname, email\_address |
| Seat | seat\_number, flight\_id |
| Airport | airport\_code, airport\_name, city, country |

**Relationships**

|  |  |
| --- | --- |
| Relationship | Type |
| Airplane - Flight | One-to-many |
| Flight - Passenger | Many-to-many |
| Flight - Seat | One-to-many |
| Flight - Airport | Many-to-many |

**Conceptual Model**

**Passenger**

**Airplane**

**Flight**

**Seat**

**Airport**

**Logical Model**

**Airplane**

model\_number registration\_number capacity

**Passenger**

given\_names surname email\_address

**Flight**

flight\_number

departure\_airport destination\_airport

departure\_date\_time

arrival\_date\_time

airplane\_id

**Seat**

seat\_number: string

flight\_id: integer

**Airport**

airport\_code: string

airport\_name: string

city: string

country: string

****Physical Model****

**Airplane**

model\_number: string (primary key)

registration\_number: string

capacity: integer

**Flight**

flight\_number: string (primary key)

departure\_airport: string

destination\_airport: string

departure\_date\_time: datetime

arrival\_date\_time: datetime

airplane\_id: integer (foreign key to Airplane)

Passenger

email\_address: string (primary key)

given\_names: string

surname: string

Airport

airport\_code: string (primary key)

airport\_name: string

city: string

country: string

**Seat**

seat\_number: string (primary key)

flight\_id: integer (foreign key to Flight)