

# TripSync: Conceptual and Relational Model

## Relational Schema

1. User( **User\_ID** , Name, Email, Phone No., Age( D.O.B , Year), Sex, Address(House No. , Address\_City , Address\_PIN) )
2. Complaints ( **Complaint number**, User\_Id(references) )  
*{Here User\_Id is referenced from User Entity that cant be Null as forced Constraint of not Null as there must be a user\_Id that needs to have for complaint (Foreign key).}*
3. Transport( **Transport\_ID** , Destn\_Location , Timings , Start\_Location , Price , Vacancy( Total , Filled ) )
4. Hotels(**Hotel\_ID**, Vacancy(Total , Filled) , Pricing)
5. Train( **Transport\_Id** , **Train No.** , Name ) { Transport\_Id is a foreign key }
6. Flight( **Transport\_Id (references)** , **Flight No.** , Name ) { Transport\_Id is a foreign key }
7. Booked\_Lounge(Date, **User\_Id**(references), Flight\_no, Offer\_code)  
*{ Here User\_Id is used as a foreignkey from user table to reference}*
8. Payments(**Payment\_ID**, User\_ID, Ticket\_ID, Payment\_Status):  
*{User\_ID and Ticket\_ID is a foreign key}*
9. Lounge(**Offers\_code**, Timings, Place, Credit card accepted)
10. Tickets(**Ticket no.**, date\_of\_journey , quantity , Amount , Train\_no) {Train\_no is a foreign key}
11. Hotel\_Invoice(Date , Hotel\_ID) {Hotel\_ID is a foreign key here}
12. Holiday\_Package(Package\_Id (Primary Key) , Ticket\_no , Hotel\_Id , Time\_Period, Discounts)
13. Files (Date)
14. Booked\_Accommodation (Date)

# ER Diagram

## 1) Entities

### 1. User

- a. User\_ID (**Primary Key**)
- b. Name
- c. Email
- d. Phone No.
- e. Age
  - i. D.O.B
  - ii. Year
- f. Sex
- g. Address
  - i. House No.
  - ii. City
  - iii. PIN

### 2. Complaints

- a. Complaint\_number (**Primary Key**)
- b. *User\_Id {Foreign Key}*
- c. *Description*

### 3. Transport

- a. Transport\_ID (**Primary Key**)
- b. Start\_Location
- c. Destination\_Location
- d. Timings
- e. Price
- f. Vacancy

### 4. Hotels

- a. Hotel\_ID (**Primary Key**)
- b. Vacancy

- i. Total
  - ii. Filled
- c. Pricing

5. Train

- a. Transport Id (Foreign Key)
- b. Train No (Primary Key)
- c. Name
- d. Date

6. Flight

- a. Transport Id (Foreign Key)
- b. Flight No (Primary Key)
- c. Name

7. Payments(

- a. Payment\_ID (Primary Key)
- b. User\_ID
- c. Hotel Id (May NULL)
- d. Ticket\_ID (May NULL)
- e. Payment\_Status

8. Lounge

- a. Offers\_code (Primary Key)
- b. Timings
- c. Place
- d. Credit card accepted

9. Tickets

- a. Ticket\_no (Primary Key)
- b. Date\_of\_journey
- c. Quantity
- d. Amount
- e. Train\_no

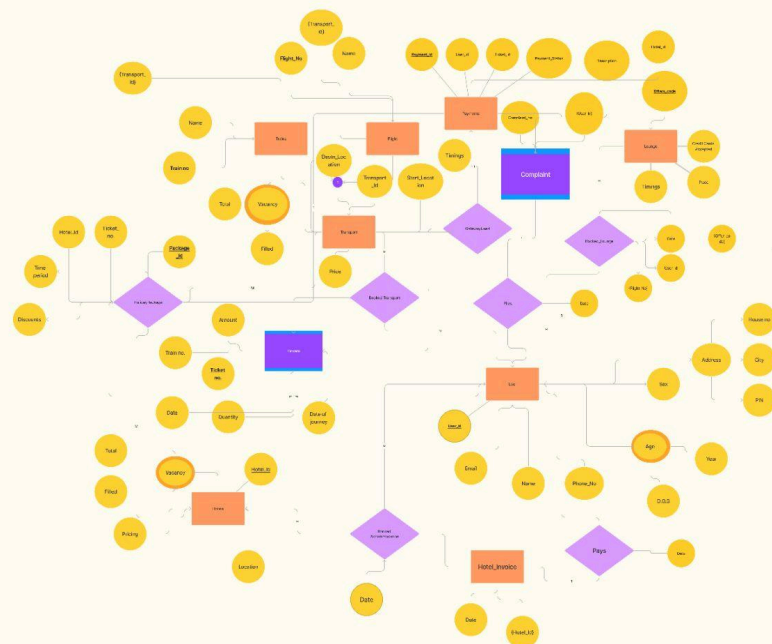
10. Hotel\_Invoice

- a. Date
- b. Hotel\_Id {Foreign Key}

## 2) Relations

- 1) Files
  - i) Date
- 2) Booked\_Lounge
  - i) Foreign Key: Offer\_code
  - ii) Date
  - iii) User\_ID
  - iv) Flight\_No
- 3) GatewayUsed
- 4) Booked Transport
- 5) Holiday Package
  - i) Primary Key: Package\_ID
  - ii) Ticket No.
  - iii) Hotel\_ID
  - iv) Time Period
  - v) Discounts
- 6) Booked Accomodation
  - i) Date
- 7) Pays

### 3) Diagram



([https://www.figma.com/file/xXRbXE9IfZNVdp9JZtlryu/Entity-relationship-\(ER\)-Diagram-\(Community\)?type=whiteboard&node-id=0%3A1&t=1ShrrOyfmnmiCiLc-1](https://www.figma.com/file/xXRbXE9IfZNVdp9JZtlryu/Entity-relationship-(ER)-Diagram-(Community)?type=whiteboard&node-id=0%3A1&t=1ShrrOyfmnmiCiLc-1))

## **Contribution of Team Members**

### ***Aditya Upadhyay (2022040)***

Established relationships between entities

Collaborated on drawing of the E-R diagram

Defined cardinalities and participation  
Constraints.

Written the document Relation Schema

### ***Mann Nariya (2022278)***

Collaborated on Ideation of the E-R diagram

Written the document for Relational Schema

Extended in accordance to the Project scope and helped in developing the E-R model

### ***Dev Utkarsh Pal (2022150)***

Collaborated on Drawing the E-R diagram and writing the document.

Helped in establishing the relationships and cardinalities.

Wrote the document Relation Schema.

### ***Keshav Chhabra(2022247)***

Determined the attributes of each entity and

Established relationships between entities .

Collaborated on Ideation of the E-R diagram

Written the document for Relational Schema

