

DBMS ASSIGNMENT DOCUMENTATION

Domain: Organization Event ticketing System:

The Organization Event Ticketing System is a software solution designed to streamline and manage the ticketing process for various events organized by an entity or organization. It addresses the challenges associated with manual ticketing processes and provides a centralized, automated solution. Key relevance points include:

- **Efficiency:** The system improves operational efficiency by automating ticket sales, reducing manual effort, and minimizing errors in the ticketing process.
- **Accessibility:** Attendees can easily browse and purchase tickets online, enhancing accessibility and convenience. Event organizers can efficiently manage ticket inventory and track sales.

Background study:

Analyzed the existing event ticketing systems or manual processes used by organizations and collected information about the requirements.

Identified key entities such as Users, Events, TicketBooking, Transactions, etc., and established relationships between them.

Tables and attributes:

1) Role tables:

Attributes: Role_id [primary key]-integer

Role_name – varchar

2) Users table: contain user details

Attributes: User_id [primary key]-integer

Role_id [foreign key]

Username - varchar

useremail - varchar

userpassword - varchar

phone_no - integer

4) Event table

Attributes: Event_id[primary key]- integer

User_id [foreign key]

Event_name -varchar

Event_date -date

Venue- varchar

5)TicketBooking table

Attributes: Ticket_id [primary key] - integer

User_id [foreign key]

Event_id [foreign key]

Ticket_category - varchar

Price - integer

Quantity integer

6)Transaction table

Attributes: Transaction_id [primary key] - integer

Ticket_id [foreign key]

Transaction_number – int

Transaction_status – varchar (50)

Transaction_date - date

Total_amout - integer

8)Cancellation table

Attributes: Cancellation_id [primary key] - integer

Ticket_id [foreign key]

Cancellation_date – timestamp

Cancellation_reason – varchar (100)

Cancellation_status – varchar (50)

7)Refund table

Attributes: Refund_id [primary key] - integer

Ticket_id [foreign key]

Refund_date – timestamp

Refund_amount – int

Refund_status – varchar (50)

NORMALIZATION:

The normalization process involves organizing the data to minimize redundancy and dependency

First Normal Form (1NF):

- Ensure all attributes are atomic (indivisible).
- Remove repeating groups.
- Ensure each attribute has a single value.
- All tables obey 1NF

Second Normal Form (2NF):

- Meet the requirements of 1NF.
- Remove partial dependencies by creating separate tables for sets of attributes dependent on part of the primary key.
- Here no tables have partial dependencies. Hence they follow 2NF

Third Normal Form (3NF):

- Meet the requirements of 2NF.
- Remove transitive dependencies by creating separate tables for attributes dependent on non-primary key attributes.
- Here no tables show transitive dependencies. Hence follow 3NF