

Event Ticketing System

1. Overview

This Event Ticketing System is aimed at managing events, venues, users, and ticket sales for efficient and organized event management. The Event Ticketing System allows users to browse events, select seats, purchase tickets, and receive electronic tickets. It supports multiple venues, event categories, and user roles (e.g., guest, registered user, administrator).

2. Table Structures:

Attribute	Data Type	Constraints
EventID	Serial, Primary Key	
Name	VARCHAR(255), Not Null	
Date	DATE, Not Null	
StartTime	TIME, Not Null	
EndTime	TIME, Not Null	
Description	TEXT	

Events

Attribute	Data Type	Constraints
CategoryID	Serial, Primary Key	
CategoryName	VARCHAR(50), Not Null	

EventCategory

Attribute	Data Type	Constraints
VenueID	Serial, Primary Key	
Name	VARCHAR(255), Not Null	
Location	VARCHAR(255), Not Null	
Capacity	INT, Not Null	

Venue

Attribute	Data Type	Constraints
SeatID	Serial, Primary Key	
SeatNumber	VARCHAR(255), Not Null	

Seats

Attribute	Data Type	Constraints
MappingID	Serial, Primary Key	
VenueID	INT, Foreign Key	References Venue(VenueID)
SeatID	INT, Foreign Key	References Seats(SeatID)

Venue_Seats_Mapping

Attribute	Data Type	Constraints
MappingID	Serial, Primary Key	
EventID	INT, Foreign Key	References Events(EventID)

CategoryID	INT, Foreign Key	References EventCategory(CategoryID)
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Events_Category_Mapping

Attribute	Data Type	Constraints
MappingID	Serial, Primary Key	
EventID	INT, Foreign Key	References Events(EventID)
VenueID	INT, Foreign Key	References Venue(VenueID)

Events_Venue_Mapping

Attribute	Data Type	Constraints
TicketID	Serial, Primary Key	
Price	DECIMAL(10, 2), Not Null	
Status	Varchar(20)	

Tickets

Attribute	Data Type	Constraints
MappingID	Serial, Primary Key	
EventID	INT, Foreign Key	References Events(EventID)
TicketID	INT, Foreign Key	References Tickets(TicketID)

Events_Tickets_Mapping

Attribute	Data Type	Constraints
UserID	Serial, Primary Key	
Username	VARCHAR(50), Not Null	
Password	VARCHAR(255), Not Null	
Email	VARCHAR(255), Not Null	
UserRole	VARCHAR(20), Not Null	

Users

Attribute	Data Type	Constraints
OrderID	Serial, Primary Key	
UserID	INT, Foreign Key	References Users(UserID)
EventID	INT, Foreign Key	References Events(EventID)
Quantity	INT, Not Null	
TotalAmount	DECIMAL(10, 2), Not Null	
PurchaseDate	TIMESTAMP, Not Null	

Orders

Attribute	Data Type	Constraints
MappingID	Serial, Primary Key	
OrderID	INT, Foreign Key	References Orders(OrderID)
TicketID	INT, Foreign Key	References Tickets(TicketID)
SeatID	INT, Foreign Key	References Seats(SeatID)

Orders_Tickets_Mapping

3. ER Diagram:

