SSignment-01

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Wssignment-01 T. Amnkumar

Event management system with Real-Time Analysis Design a database for manging events, attendee, tickets, and Venue logistics Requirements create table for events, venue tickets, with relationship defined between each unité son queries to provide real time analytics on ticket sales attendance and revenue. Add trigers to automatically update event capacity and notify event organizers when a threeshold of tickets is reached

1. Conceptual ER diagram: The conceptual ER diagram provides a high

level overview of the main enities, and their relationships in the system.

		* *
Event	Venue.	Altendee.
EventID Name Date	Venue ID Name Location	Attendee ID Name contact INFO
1	lan e	*** ,

Ticket sales Ticket Vicket ID. Event IP Type.

Event ID -Attendee 10 sales Date Quantity.

Conceptual Model Explanation: - Event: Represents each event manged by system. + venue: Repriesents the venue where the event place. -A-AHENDER: Represents indivials attending events.

-A Ticket: Represents the type and prices of tickets for event. - A Ticketsale: Represents ticket sales and transactions for each attandee 2. Logical ER diagnam: The logical ER diagram adds som more detail. including primary key foreign key and attributes that Specify entity relationships. Event Menula Menula Attendee Event ID Cpk) venue (P) (PK) Attendee (PK) Name Mame Name Date Location contact Info venue ID (FK) capacity. email. 1, , , , , , , gicket. Vicketsales Vicket ID Cpk) Oicketsals (pk) Event ID (FK) Eventap (Ft) Altendee(fk) Price Type.

Logical Model Explanation!

* primary keys (pk): unique Identifiers for each table

- I foreign keys (TK): linking table Eg: Event IP in Ticket referencing Event IP

- Additional Attributes !-

Event includes a venue Ip as a foreignkey.

Venue includes capacity attribute for seating limits.

Tickel sales includes Quantity and Amount to each sale

Physical ER diagram

The physical GR diagour father specifies data types, constraits, and table structures for implementation in a database, managnent system.

Event.

EventIP (pk)

Name varoual

Date Date,

venueID (k)

Venue IP(PK)
Namo VARCHAR
Cocation MARCHAR
Capacity INT

Affordee (k): Name Contact INFO Email WARCHER

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1 1 1 1 1 1 1 1 1 1 1

1000 - 1 4:

Ticket (PK) IM EventID (FK) IM price pecimal (mx) Type varcus Ticketsales

(Ticketsale (PK)

Event ID (Ft) INT

Affendec (FK) INT

Quantity INT

sale Pale DATE

A moont Decimal(8)

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Physical model Explanation
 Data Type:
A Integer types (INT) for IDS and Capacitles

A VARCHAR for text data like name and types.

A Decimal for monetary amounts.
                     Constraints !!
A foreign keys entoxe referential integrity.
SQL statements:-
  CREATE TABLE Events (
   EventID INT Primary Key.
    Event Name YARCHAR (255),
    Event Date DATE,
    Event Time TIME,
                                            21 11 1
  menue ID INT,
                                            · Caller on the
   Capacity INT,
Ticket price Decimal (10,2)
  CRETTE TABLE Venues (
   venue IP INT Primary Key,
   venue Name VARCHOR(155)
   Address VARCHAR (255),
                                           city VARCHAR (60);
   State VARCHAR (100)
```

CREATE TABLE Tickels (Tickel ID INT Primary key, EventIP INT, Altendee ID INTO Ticket type VARCHAR (100), Tickel status MRCHAR (100). Purchase Date DATE) purchase Time TIME, price paid Decimal (10,2), Foreign key (Event 10) References Events (Event ID), FOREIGN KEY CAHANDER ID), REFERENCES Attendees (Attendee ID) CREATE TABLE A Hendees (AltendeelD INT Primary Key, first Name MARCHAR (100) Last Name VARCHAR (100); Email VARCHAR (225) phone varchar (20)

CREATE TABLE Waitlis (Waiths INT PRIMARY KEY EventID INT Altendee IDINT, wartlist Date DATE waitlist Time TIME, foreign key (AttendeelD) REFEREN Attendees (Attendee ID) Styres: 122 (at solve) 122 vax vilak Conclusion Con minorally sugar The poroposed Event management system database effectivly manages events, attendes ticket and venue logistics.

1. Scalable database structure: The design incorporate. Separate tables for events, Venues, ticket ensuring scalability and flexibility. 2. Relationships and constraints! Defined relationships. b/w table ensure data consistency, while contraints prevent invalid data entry

3. Stored procedures: - Implemented procedures stream line ticket sales management including waithisting for sold out events. 4. Real-time Analytics! - Provided SQL Queires offer instant insignts into sales, event attandance, and 5. Atomated Triggers! - Implemented triggers update event capacity and notify oraganizers when ticket thresholds our reached.