

Project Documentation

Course Title: Data Base Management System

Course Code: CSE0612216

Project Name: Easy E-Event Managing System

Submitted To:

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Event Management System

Objectives:

The relational database for managing events, users, tickets, registrations, and feedback is designed for efficient data retrieval and integrity.

It includes key entities: Users, Events, Tickets, Registrations, and Feedback. Users can organize events, register for tickets, and provide feedback.

Primary keys ensure unique identification, while foreign keys maintain referential integrity. Constraints validate data entries, and SQL queries enable efficient data retrieval and reporting. This design effectively manages event-related data.

> Introduction

The Event & Ticket Management System is developed to streamline the organization and management of events.

It handles user registrations, ticket purchases, event scheduling, and feedback collection, ensuring a seamless experience for both organizers and attendees.

Experimental Setup

- Database Management System: MySQL

- Development Environment: MySQL Workbench

- Operating System: Windows 10

Code & Output(ScreenShot)

a. Users Table Creation

```
CREATE TABLE Users(
```

User_ID INT(10) PRIMARY KEY,

Name_s VARCHAR(50),

Email VARCHAR(100) NOT NULL UNIQUE,

Phone VARCHAR(15),

Password VARCHAR(255) NOT NULL,

Role ENUM('Admin', 'Organizer', 'Attendee')

);

b. Events Table Creation

```
CREATE TABLE Event_s(
```

Event_ID INT(10) PRIMARY KEY,

Title VARCHAR(100) NOT NULL,

Descriptions TEXT,

Dates DATE NOT NULL,

Times TIME NOT NULL,

Location VARCHAR(200),

Max_capacity INT CHECK(Max_capacity>0 AND Max_capacity>=30)

);

c. Tickets Table creation

```
CREATE TABLE Tickets(
  Ticket_ID INT(10) PRIMARY KEY,
  Event_ID INT(10),
  FOREIGN KEY(Event_ID) REFERENCES Event_s(Event_ID),
  Ticket_type VARCHAR(50) NOT NULL,
  Price DECIMAL(10, 2) NOT NULL,
  Total_available INT CHECK (total_available >= 0), Total_sold INT
  DEFAULT 0 CHECK (total_sold >= 0)
  );
d. Registration Table creation.
  CREATE TABLE Registrations(
  Registration_id INT(10) PRIMARY KEY,
  User_ID INT(10),
  FOREIGN KEY(User_ID) REFERENCES Users(User_ID),
  Event_ID INT(10),
 FOREIGN KEY(Event_ID) REFERENCES Event_s(Event_ID),
  Ticket_ID INT(10),
```

FOREIGN KEY (Ticket_ID) REFERENCES Tickets(Ticket_ID),

Registration_date DATETIME DEFAULT

CURRENT_TIMESTAMP);

e. Feedback Table Creation

```
CREATE TABLE Feedback(
```

Feedback_ID INT(10) PRIMARY KEY,

Event ID INT(10),

FOREIGN KEY(Event_ID) REFERENCES Event_s(Event_ID),

User_ID INT(10),

FOREIGN KEY (User_ID) REFERENCES Users(User_ID),

Rating INT CHECK (rating >= 1 AND rating <= 5),

Comments TEXT,

Feedback_date DATETIME DEFAULT CURRENT_TIMESTAMP
);

f. Sample Query Execution

```
INSERT INTO Users (User_ID , Name_s , Email , Phone , Password , Role) VALUES
(001,'Rahim Khan', 'rahim@gmail.com', '01712345678', 'dbsd*dfaaf', 'Attendee'),
(002,'Karim Ahmed', 'karim@gmail.com', '01723456789', 'sfgd886dds@', 'Organizer'),
(003,'Fatema Begum', 'fatema@gmail.com', '01734567890', '126d4fdf8', 'Attendee'),
(004,'Ankur', 'ankur2003.8@gmail.com', '01890255384', 'ankur@@123', 'Admin'),
(005,'Jamal Hossain', 'jamal@gmail.com', '01756789012', '544544dszvfd', 'Attendee'),
(006,'Nabila Sultana', 'nabila@gmail.com', '01767890123', '66bhdvdvdv@', 'Organizer'),
(007,'Rafiqur Rahman', 'rafiqur@gmail.com', '01778901234', 'djbfgas66', 'Attendee'),
(008,'Shabnam Akter', 'shabnam@gmail.com', '01789012345', 'rfgddd5556', 'Attendee'),
(009,'Tariq Islam', 'tariq@gmail.com', '01790123456', '@jfdjka645', 'Organizer'),
(0010,'Zara khan', 'zara@gmail.com', '01701234567', '@@kodjods', 'Admin');
SELECT *FROM Users;
```

t Grid 🔢 🛟 Filter Rows: Export: 🖫 Wrap Cell Content: 🏗					
lser_ID	Name_s	Email	Phone	Password	Role
	Rahim Khan	rahim@gmail.com	01712345678	dbsd*dfaaf	Attendee
	Karim Ahmed	karim@gmail.com	01723456789	sfgd886dds@	Organizer
	Fatema Begum	fatema@gmail.com	01734567890	126d4fdf8	Attendee
	Ankur	ankur2003.8@gmail.com	01890255384	ankur@@123	Admin
	Jamal Hossain	jamal@gmail.com	01756789012	544544dszvfd	Attendee
	Nabila Sultana	nabila@gmail.com	01767890123	66bhdvdvdv@	Organizer
	Rafigur Rahman	rafiqur@gmail.com	01778901234	djbfgas66	Attendee
	Shabnam Akter	shabnam@gmail.com	01789012345	rfgddd5556	Attendee
	Tariq Islam	tariq@gmail.com	01790123456	@jfdjka645	Organizer
)	Zara khan	zara@gmail.com	01701234567	@@kodjods	Admin

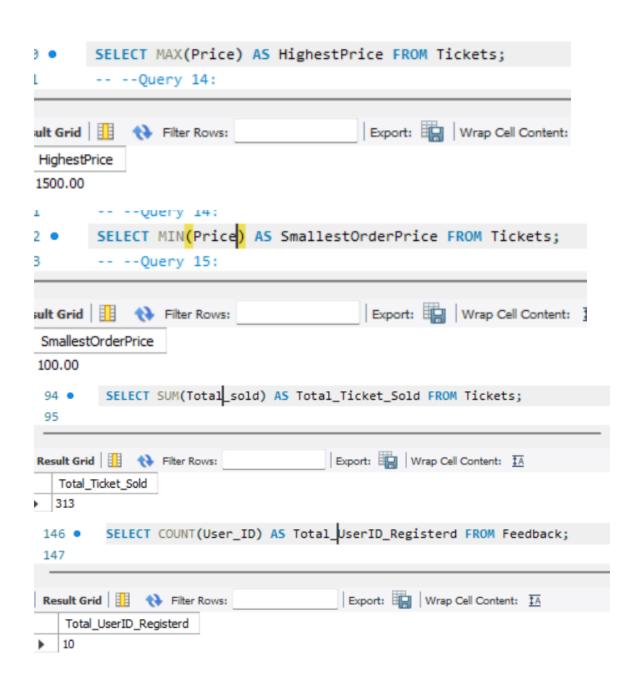
```
INSERT INTO Event_s (Event_ID, Title, Descriptions, Dates, Times, Location, Max_capacity) VALUES
      (12391, 'Dhaka International Trade Fair', 'Annual trade fair showcasing products from local and international vendors.', '2023-12-01',
      (12392, 'Ekushey Book Fair', 'The largest book fair in Bangladesh celebrating Bengali literature and culture.', '2023-02-01', '09:00:00
      (12393, 'Pohela Boishakh Festival', 'Traditional Bengali New Year celebrations with cultural programs.', '2023-04-14', '08:00:00', 'Ram
      (12394, 'Dhaka International Film Festival', 'Showcasing independent and international films.', '2023-03-20', '16:00:00', 'Shilpakala A
      (12395, 'Bangladesh Fashion Week', 'Annual fashion event featuring designers and models from Bangladesh.', '2023-11-05', '18:00:00', 'P
      (12396, 'Chittagong Hill Tracts Cultural Festival', 'Traditional festival showcasing indigenous culture and heritage.', '2023-10-10',
      (12397, 'Sylhet Tea Festival', 'Celebrating tea industry and culture in the Sylhet region.', '2023-09-15', '09:30:00', 'Sylhet Tea Gard
      (12398, 'Bagerhat Mosque Heritage Tour', 'Tour and events focused on historic mosques and architecture.', '2023-08-20', '11:00:00', 'Ba
      (12399, 'Rajshahi Silk Festival', 'Festival promoting Rajshahi silk and handloom products.', '2023-07-25', '10:00:00', 'Rajshahi City C
      (123910, 'Cox's Bazar Beach Carnival', 'Annual beach carnival with cultural programs and sports.', '2023-12-20', '15:00:00', 'Cox's
      SELECT *FROM Event s:
2 .
                                       Export: Wrap Cell Content: TA
sult Grid | 🔢 💎 Filter Rows:
 Event_ID Title
                                        Descriptions
                                                                                                 Location
                                                                                                                                      Max_capacity
         Dhaka International Trade Fair
                                       Annual trade fair showcasing products from loc...
                                                                            2023-12-01
                                                                                       10:00:00
                                                                                                Bangabandhu International Conference Center,...
12391
                                                                                                                                      1000
         Ekushey Book Fair
                                       The largest book fair in Bangladesh celebrating ... 2023-02-01 09:00:00
                                                                                                Dhaka University Campus, Dhaka
                                                                                       08:00:00
12393
          Pohela Boishakh Festival
                                       Traditional Bengali New Year celebrations with c... 2023-04-14
                                                                                                Ramna Park, Dhaka
                                                                                                                                      2000
12394
         Dhaka International Film Festival
                                       Showcasing independent and international films. 2023-03-20 16:00:00
                                                                                                Shilpakala Academy, Dhaka
                                                                                                                                      300
12395
         Bangladesh Fashion Week
                                       Annual fashion event featuring designers and m... 2023-11-05 18:00:00
                                                                                                Pan Pacific Sonargaon Hotel, Dhaka
                                                                                                                                      400
12396
         Chittagong Hill Tracts Cultural Festival Traditional festival showcasing indigenous cultur... 2023-10-10 10:00:00
                                                                                                Chittagong Hill Tracts, Bandarban
                                                                                                                                      600
          Sylhet Tea Festival
                                       Celebrating tea industry and culture in the Sylh... 2023-09-15
                                                                                       09:30:00
                                                                                                Sylhet Tea Gardens, Sylhet
                                                                                                                                      500
12398
         Bagerhat Mosque Heritage Tour
                                       Tour and events focused on historic mosques a... 2023-08-20 11:00:00
                                                                                                Bagerhat, Khulna Division
                                                                                                                                      300
         Rajshahi Silk Festival
12300
                                       Festival promoting Rajshahi silk and handloom p... 2023-07-25
                                                                                      10:00:00
                                                                                                Rajshahi City Center, Rajshahi
                                                                                                                                      450
123910 Cox's Bazar Beach Carnival
                                       Annual beach carnival with cultural programs an... 2023-12-20 15:00:00 Cox's Bazar Beach, Cox's Bazar
                                                                                                                                      1000
   72 • INSERT INTO Tickets (Ticket_ID, Event_ID, Ticket_type, Price, Total_available, Total_sold) VALUES
   73
            (40121, 12391, 'VIP', 1500.00, 100, 4),
            (40122, 12392, 'General ', 500.00, 400, 32),
   74
   75
            (40123, 12393, 'Regular', 200.00, 300, 50),
            (40124, 12394, 'Entry Pass', 100.00, 500, 50),
   76
   77
            (40125, 12395, 'Screening', 800.00, 250, 30),
            (40126, 12396, 'Front Row', 1200.00, 50, 20),
   78
            (40127, 12397, 'Cultural Pass', 300.00, 200, 32),
   79
   80
            (40128, 12398, 'Tea Tour', 400.00, 150, 20),
   81
            (40129, 12399, 'Heritage Entry', 350.00, 100, 35),
   82
             (401210, 123910, 'Silk Festival Pass', 600.00, 180, 40);
            SELECT *FROM Tickets;
   83 •
 Export: Wrap Cell Content: IA
     Ticket_ID Event_ID Ticket_type
                                                        Total_available Total_sold
     40121
                12391
                           VIP
                                             1500.00
                                                        100
     40122
                           General
                                             500.00
                12392
                                                       400
                                                                        32
     40123
                12393
                           Regular
                                             200.00
                                                       300
                                                                        50
     40124
                12394
                           Entry Pass
                                             100.00
                                                       500
                                                                        50
     40125
                12395
                           Screening
                                             800.00
                                                       250
                                                                        30
     40126
                12396
                           Front Row
                                             1200.00 50
                                                                        20
     40127
                12397
                           Cultural Pass
                                             300.00
                                                       200
                                                                        32
                                                                        20
     40128
                12398
                           Tea Tour
                                             400.00
                                                       150
     40129
                12399
                           Heritage Entry
                                             350.00
                                                       100
                                                                        35
     401210
             123910 Silk Festival Pass 600.00 180
                                                                        40
```

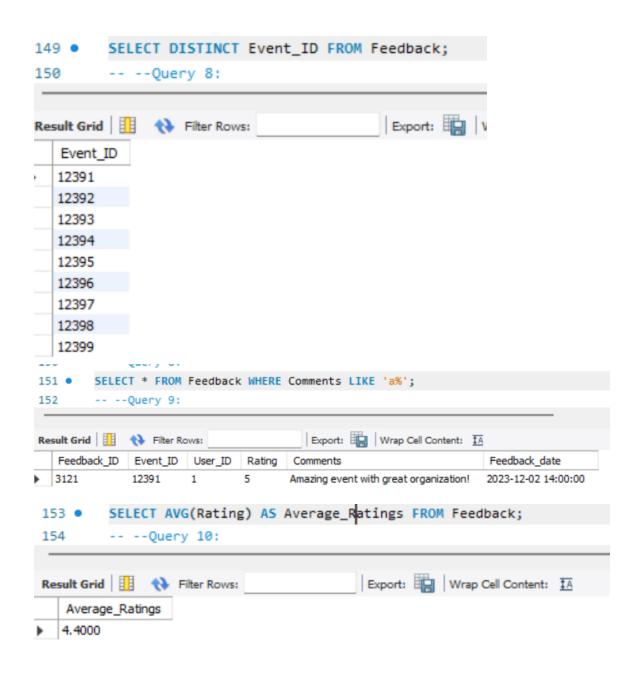
```
INSERT INTO Registrations (Registration_id, User_ID, Event_ID, Ticket_ID, Registration_date) VALUES
8 .
19
       (1235461, 001, 12391, 40121, '2023-11-01 09:15:00'),
       (1235462,002, 12392, 40122, '2023-11-01 09:30:00'),
0
       (1235463, 003, 12393, 40123, '2023-02-10 10:00:00'),
1
       (1235464, 004, 12394, 40124, '2023-04-14 08:30:00'),
       (1235465, 005, 12395, 40125, '2023-11-10 11:15:00'),
3
       (1235466, 006, 12396, 40126, '2023-11-25 18:30:00'),
4
      (1235467, 007, 12397, 40127, '2023-10-10 10:45:00'),
5
       (1235468, 008, 12398, 40128, '2023-09-15 09:45:00'),
6
       (1235469, 009, 12399, 40129, '2023-08-20 11:30:00'),
       (12354610, 0010, 123910, 401210, '2023-07-25 10:00:00');
       SELECT *FROM Registrations;
Export: Wrap Cell Content: TA
 Registration_id User_ID Event_ID Ticket_ID Registration_date
 1235461
                        12391
                                  40121
                                            2023-11-01 09:15:00
               1
 1235462
                        12392
                                  40122
                                            2023-11-01 09:30:00
               2
 1235463
                        12393
                                  40123
                                           2023-02-10 10:00:00
 1235464
                      12394 40124 2023-04-14 08:30:00
             4
 1235465
                        12395
                                  40125
                                            2023-11-10 11:15:00
 1235466
               6
                     12396
                                 40126 2023-11-25 18:30:00
 1235467
                                            2023-10-10 10:45:00
                        12397
                                  40127
 1235468
               8
                       12398
                                  40128
                                           2023-09-15 09:45:00
 1235469
                        12399
                                  40129
                                            2023-08-20 11:30:00
                                 401210 2023-07-25 10:00:00
12354610 10 123910
134 • INSERT INTO Feedback (Feedback_ID, Event_ID, User_ID, Rating, Comments, Feedback_date) VALUES
135
        (3121, 12391, 001, 5, 'Amazing event with great organization!', '2023-12-02 14:00:00'),
        (3122, 12391, 002, 4, 'Very informative but venue was a bit crowded.', '2023-12-02 15:30:00'),
        (3123, 12392, 003, 5, 'Loved the cultural performances and food stalls.', '2023-02-03 12:20:00'),
137
138
        (3124, 12393, 004, 4, 'Good exhibition but could use more lighting.', '2023-04-15 10:00:00'),
139
        (3125, 12394, 005, 3, 'Food Festival was okay, but queue management needed improvement.', '2023-11-11 12:45:00'),
        (3126, 12395, 006, 5, 'Startup Pitch Night was inspirational and well executed.', '2023-11-26 19:30:00'),
140
        (3127, 12396, 007, 4, 'Great cultural festival but weather was hot.', '2023-10-11 11:15:00'),
        (3128, 12397, 008, 5, 'Loved the tea festival and the tours.', '2023-09-16 13:00:00'),
143
        (3129, 12398, 009, 4, 'Heritage tour was enlightening.', '2023-08-21 10:10:00'),
        (31210, 12399, 0010, 5, 'Silk festival had beautiful products and friendly sellers.', '2023-07-26 14:25:00');
144
145 • SELECT *FROM Feedback;
Export: Wrap Cell Content: TA
  Feedback date
  3121
                                     Amazing event with great organization!
                                                                        2023-12-02 14:00:00
                              4
                                    Very informative but venue was a bit crowded.
  3122
              12391
                     2
                                                                       2023-12-02 15:30:00
  3123
              12392
                                     Loved the cultural performances and food stalls. 2023-02-03 12:20:00
  3124
              12393 4
                                     Good exhibition but could use more lighting.
                                                                        2023-04-15 10:00:00
              12394
                                     Food Festival was okay, but queue managemen... 2023-11-11 12:45:00
              12395 6
                              5 Startup Pitch Night was inspirational and well ex... 2023-11-26 19:30:00
  3126
  3127
              12396
                                     Great cultural festival but weather was hot.
                                                                        2023-10-11 11:15:00
  3128
              12397
                     8
                              5
                                     Loved the tea festival and the tours.
                                                                        2023-09-16 13:00:00
              12398
                                     Heritage tour was enlightening.
                                     Silk festival had beautiful products and friendly ... 2023-07-26 14:25:00
  31210
             12399
condition to the
```

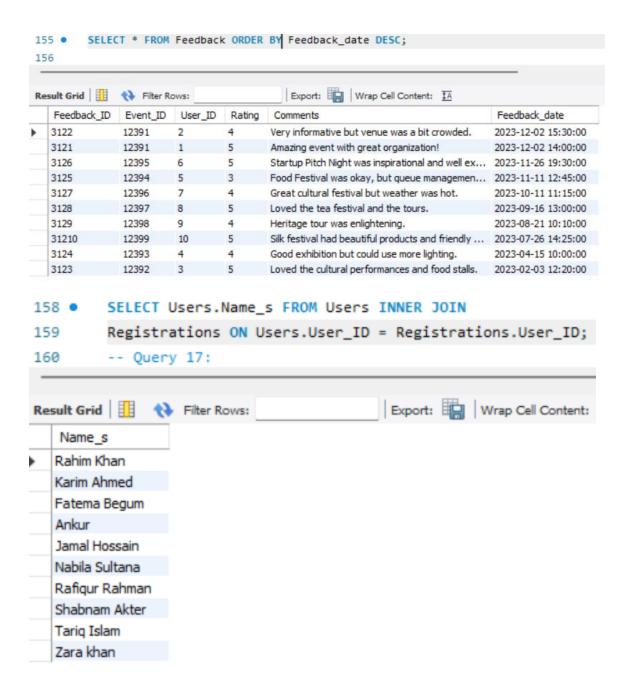
```
INSERT INTO Purchase_Tickets (Ticket_ID, Event_ID, User_ID, Purchased) VALUES
186
        (40121, 12391, 001, 5),
187
        (40122, 12392, 002, 3),
188
        (40123, 12393, 003, 2),
       (40124, 12394,004, 4),
189
       (40125, 12395, 005, 1),
190
       (40126, 12396, 006, 6),
191
       (40127, 12397, 007, 2),
192
      (40128, 12398, 008, 7),
193
       (40129, 12399, 009, 8),
194
195
       (401210, 123910,010, 9);
196 •
       select *from Purchase_Tickets;
                                      Export: Wrap Cell Content: IA
Result Grid 🔢 🙌 Filter Rows:
  40121
          12391
                   1
                           5
  40122 12392 2
                         3
  40123
          12393
        12394 4
                          4
  40124
  40125
          12395
                   5
                           1
  40126
       12396 6
  40127
          12397
  40128
        12398 8
                           7
  40129
          12399
  401210
         123910 10
                         9

    SELECT Ticket_type, Price FROM Tickets WHERE Ticket_type="VIP" AND Price= 1500.00;

      -- -- Query 12:
                                     Export: Wrap Cell Content: IA
sult Grid 🔢 🙌 Filter Rows:
Ticket_type Price
VIP
           1500.00
       SELECT Ticket_type FROM Tickets WHERE (Price BETWEEN 500.00 AND 1200.00);
88 •
89
       -- -- Ouerv 13:
                                        Export: Wrap Cell Content: IA
esult Grid 🔢 🚷 Filter Rows:
 Ticket_type
 General
 Screening
 Front Row
 Silk Festival Pass
```









Discussion

The database was structured to be simple and easy to understand, and to ensure data integrity. Implementing foreign key constraints facilitated the establishment of relationships between tables, such as linking users to their registrations and feedback. Challenges encountered included handling enum data types and ensuring the uniqueness of certain fields like email addresses. These were addressed by defining appropriate constraints and data types. I had trouble making the last query to make the purchase ticket record, so I asked my friend, and then we did some research together to solve it.

Conclusion

The Event & Ticket Management System effectively manages various aspects of event organisation, from user registrations to feedback collection. Future enhancements could include integrating a user-friendly frontend interface and implementing real-time notifications for users.

ER Diagram

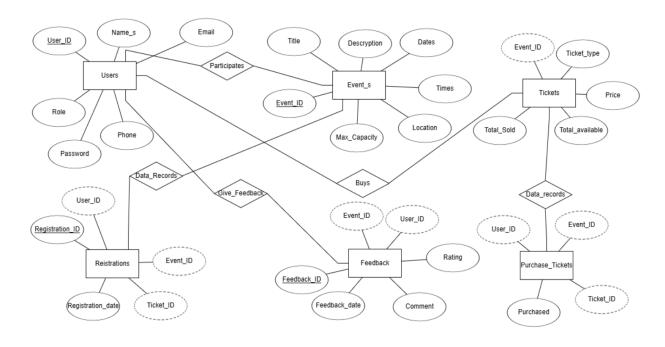
Entities:

- Users
- Event_s
- Tickets
- Registrations
- Feedback
- Purchase_Tickets

Relationships:

- Users \leftrightarrow Registrations \leftrightarrow Event_s
- Event_s ↔ Tickets
- Tickets ↔ Purchase_Tickets
- Users ↔ Feedback

•



♦ Relational Diagram

Tables and their keys:

- Users (User_ID PK)
- Event_s (Event_ID PK)
- Tickets (Ticket_ID PK, Event_ID FK)
- Registrations (Registration_id PK, User_ID FK, Event_ID FK, Ticket_ID FK)
- Feedback (Feedback_ID PK, Event_ID FK, User_ID FK)
- Purchase_Tickets (Ticket_ID, Event_ID, User_ID FK combination)

