



CSE302: Database Systems (Section No.7)

[FALL 25]

Project Report

EWU Event Management WebApp

Submitted by (Group 8):

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<https://github.com/kamrulhasan-arch/Ewu-event-management>

<https://github.com/rupaisanzida-create/ewu-event-management>

https://github.com/MahAbubALamBadHon/ewu_event_management

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1. Project Description

The EWU Event Management System is a web-based database application designed to automate and streamline event planning and management processes at East West University. This system simulates a real-world scenario where educational institutions require efficient coordination of various academic and recreational events including seminars, workshops, conferences, cultural programs, sports tournaments, and corporate meetings.

2. Key Features

Administrative Functions:

- Complete event lifecycle management from creation to completion
- Venue administration with capacity planning and cost management
- Meal package coordination with catering company partnerships
- Real-time booking monitoring and approval workflows
- Comprehensive financial reporting and cashflow analysis
- Sponsor relationship management with funding allocation tracking
- Equipment and logistics coordination for event setup
- Customer account oversight and booking analytics
- Multi-level dashboard with operational insights

Customer Functions:

- Secure user registration with profile management capabilities
- Event discovery with detailed information and filtering options
- Online booking system with real-time availability checking
- Integrated guest management for event invitations
- Multi-method payment processing with transaction history
- Personal booking dashboard with status tracking
- Post-event feedback and rating system
- Account management with booking history analytics

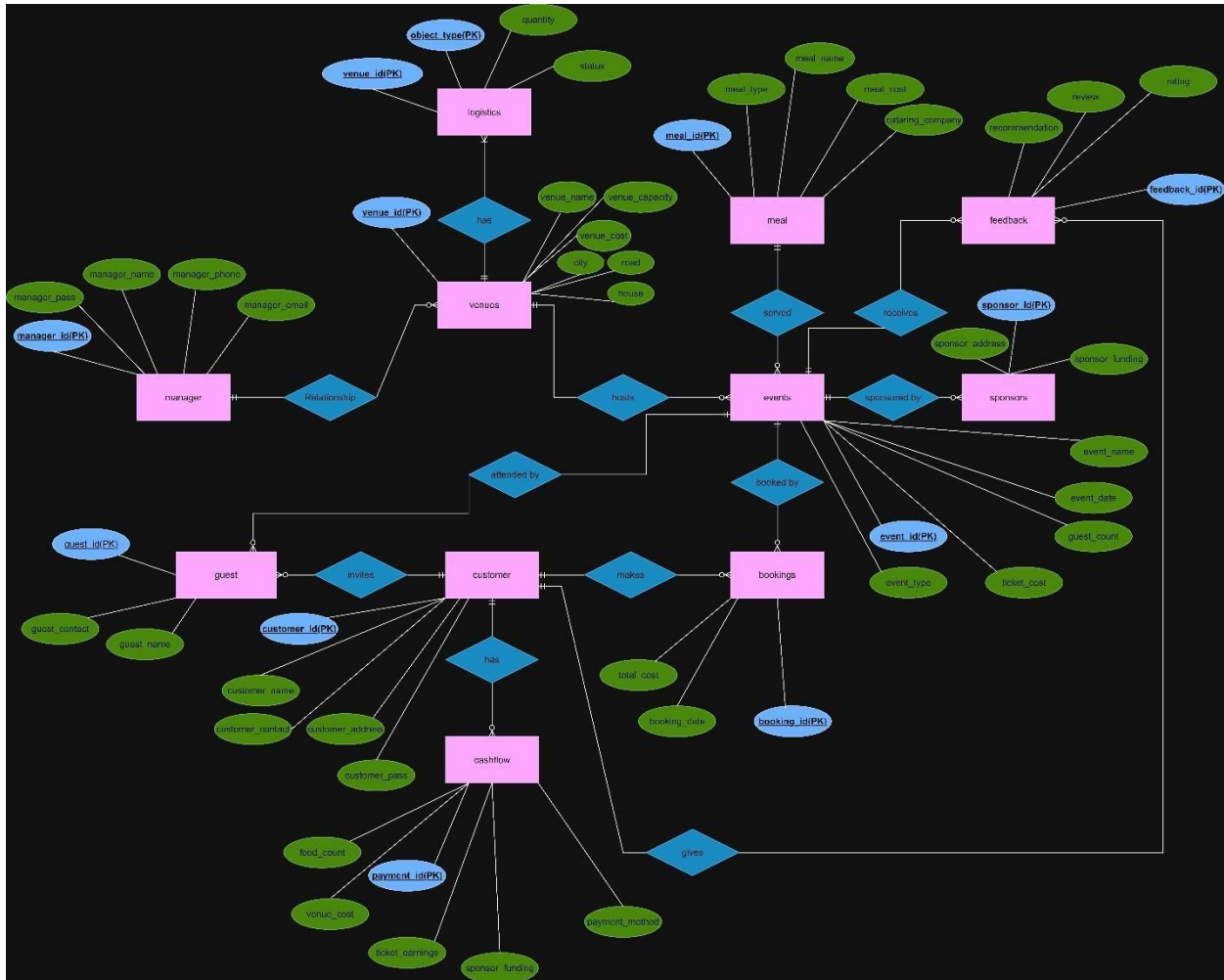
System-Level Features:

- Role-based access control with secure authentication
- Automated unique ID generation for all entities
- Data validation and integrity constraint enforcement
- Real-time booking conflict prevention

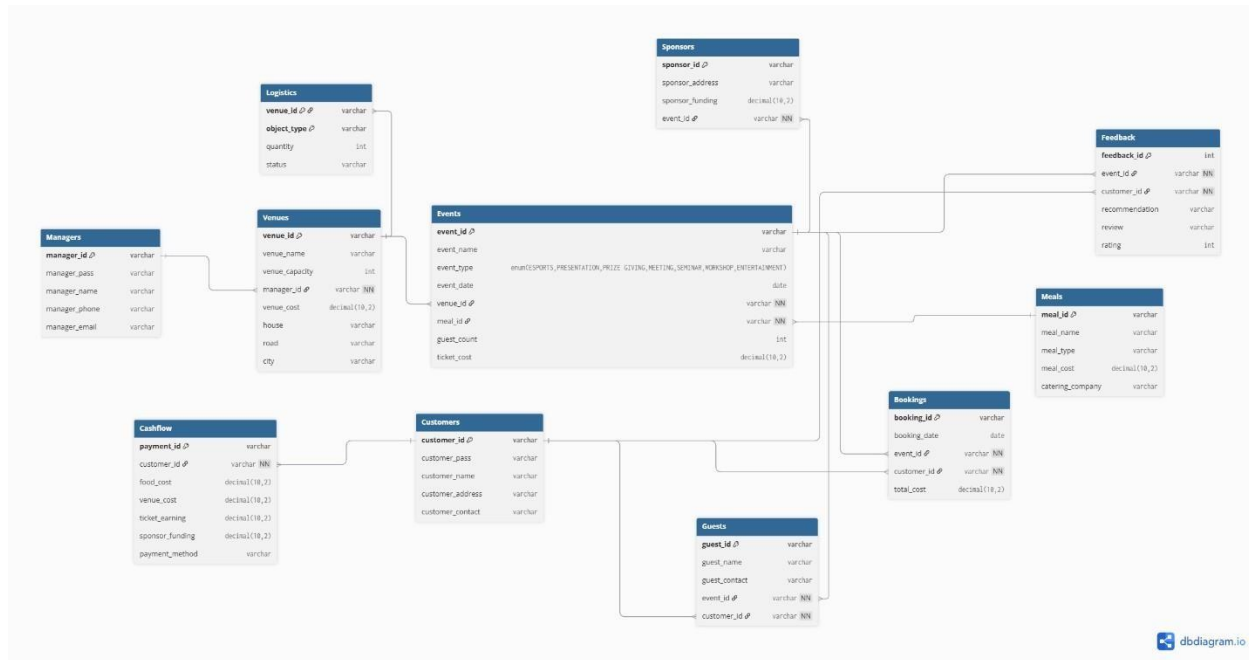
- Automated financial calculations across related tables
- Comprehensive audit trails for administrative actions
- Responsive web interface compatible across devices

3. Database Design

3.1 E-R Model



3.2 Relational Data Model



MANAGER

— manager_id VARCHAR(5) [PRIMARY KEY]
 — manager_pass VARCHAR(60) [NOT NULL]
 — manager_name VARCHAR(100)
 — manager_phone VARCHAR(20) —
 manager_email VARCHAR(100)

VENUES

— venue_id VARCHAR(5) [PRIMARY KEY]
 — venue_name VARCHAR(100)
 — venue_capacity INT
 — manager_id VARCHAR(5) [FOREIGN KEY → Managers.manager_id]
 — venue_cost DECIMAL(12,2)
 — house VARCHAR(100) —
 road VARCHAR(100) — city
 VARCHAR(100) MEALS

|— meal_id VARCHAR(5) [PRIMARY KEY]
|— meal_name VARCHAR(100)
|— meal_type VARCHAR(50)
|— meal_cost DECIMAL(12,2) |—
catering_company VARCHAR(100)

EVENTS

|— event_id VARCHAR(5) [PRIMARY KEY]
|— event_name VARCHAR(100)
|— event_type ENUM('ESPORTS','PRESENTATION','PRIZE
GIVING','MEETING','SEMINAR','WORKSHOP','ENTERTAINMENT')
|— event_date DATE
|— venue_id VARCHAR(5) [FOREIGN KEY → Venues.venue_id]
|— meal_id VARCHAR(5) [FOREIGN KEY → Meals.meal_id]
|— guest_count INT
|— ticket_cost DECIMAL(12,2)
|— UNIQUE CONSTRAINT (venue_id, event_date, event_type)

CUSTOMERS

|— customer_id VARCHAR(5) [PRIMARY KEY]
|— customer_pass VARCHAR(60) [NOT NULL]
|— customer_name VARCHAR(100)
|— customer_address VARCHAR(200) |—
customer_contact VARCHAR(20)

BOOKINGS

|— booking_id VARCHAR(5) [PRIMARY KEY]
|— booking_date DATE
|— event_id VARCHAR(5) [FOREIGN KEY → Events.event_id CASCADE DELETE] |—
customer_id VARCHAR(5) [FOREIGN KEY → Customers.customer_id CASCADE DELETE]
|— total_cost DECIMAL(12,2)

GUESTS

|— guest_id VARCHAR(5) [PRIMARY KEY]
|— guest_name VARCHAR(100)
|— guest_contact VARCHAR(20)
|— event_id VARCHAR(5) [FOREIGN KEY → Events.event_id CASCADE DELETE]

└── customer_id VARCHAR(5) [FOREIGN KEY → Customers.customer_id CASCADE DELETE]

SPONSORS

└── sponsor_id VARCHAR(5) [PRIMARY KEY]
└── sponsor_address VARCHAR(200) └──
sponsor_funding DECIMAL(12,2)
└── event_id VARCHAR(5) [FOREIGN KEY → Events.event_id CASCADE DELETE]

CASHFLOW

└── payment_id VARCHAR(5) [PRIMARY KEY]
└── customer_id VARCHAR(5) [FOREIGN KEY → Customers.customer_id CASCADE DELETE]
└── food_cost DECIMAL(12,2)
└── venue_cost DECIMAL(12,2)
└── ticket_earning DECIMAL(12,2)
└── sponsor_funding DECIMAL(12,2) └──
payment_method VARCHAR(50)

FEEDBACK

└── feedback_id INT [PRIMARY KEY AUTO_INCREMENT]
└── event_id VARCHAR(5) [FOREIGN KEY → Events.event_id CASCADE DELETE] └──
customer_id VARCHAR(5) [FOREIGN KEY → Customers.customer_id CASCADE DELETE]
└── recommendation VARCHAR(100)
└── review VARCHAR(500)
└── rating INT

LOGISTICS

└── venue_id VARCHAR(5) [FOREIGN KEY → Venues.venue_id CASCADE DELETE]
└── object_type VARCHAR(50)
└── quantity INT
└── status VARCHAR(50)
└── PRIMARY KEY (venue_id, object_type)

4. Tools & Technologies Used

1. HTML,CSS(Front end)
 2. PHP (Back end)
 3. MySql(Database)
 4. XAMPP (for local hosting)
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5. Role Assignment


Administrator Role (Admin)


- **Authentication Method:** Manager ID and encrypted password • **Access Level:** Complete system administration privileges • **Core Responsibilities:**
 - Event lifecycle management including creation, modification, and deletion
 - Venue inventory management with capacity planning and pricing strategies
 - Meal package administration and catering partner coordination
 - Real-time booking oversight with approval and cancellation capabilities
 - Comprehensive financial monitoring including revenue, expenses, and profitability analysis
 - Sponsor relationship management with funding tracking and partnership coordination
 - Equipment and logistics management for successful event execution
 - System analytics and operational reporting for strategic decision making
 - Customer account management and support resolution

Customer Role (Students)

- **Authentication Method:** Customer ID and encrypted password with registration capability
- **Access Level:** Personal account management and event interaction functionality • **Core Responsibilities:**
 - Personal profile management including contact information and preferences
 - Event discovery with advanced filtering and detailed information access
 - Online booking capabilities with real-time availability verification
 - Guest list management for event attendee coordination
 - Integrated payment processing with multiple payment method support
 - Personal booking history with status tracking and modification options
 - Post-event feedback submission with rating and review capabilities
 - Account dashboard with personal analytics and upcoming event notifications


6. GUI Screenshot Home page:

 **EWU Event Management**
Your premier event booking and management platform

 **Admin Login**
For event managers and administrators
Manager ID

Password

Login as Admin

 **Student Login**
For students booking events
Student ID

Password

Login as Client
No account? [Register here](#)

STUDENT/CUSTOMER SIDE:

[Profile](#) [Book Events](#) [My Bookings](#) [Payments](#) [Feedback](#) [Logout](#)

Welcome, sanbi

Quick Stats
My Bookings: **1**
My Guests: **1**
Available Events: **1**

Quick Actions
[Book New Event](#)
[View My Bookings](#)
[Leave Feedback](#)

Upcoming Events

Event	Type	Date	Venue	Capacity	Ticket Price	Action
FORTNITE FINALS ID: 1		2025-10-20	Blue Moon Hall	600	₺300.00	<button>Book Now</button>

My Recent Bookings

--	--	--	--	--	--	--

Booking Events Page:

[Dashboard](#) [Profile](#) [My Bookings](#) [Payments](#) [Feedback](#) [Logout](#)

Book Events & Manage Guests

Available Events

FORTNITE FINALS
Type:
Date: 2025-10-20
Venue: Blue Moon Hall
Price: ₹300.00
Select to Book

Add Guest to Event

Guest Name

Guest Contact

Select Event

-- Choose Event --

Add Guest

My Guests

Name	Contact	Event	Event Date
abir	011111111	FORTNITE FINALS	2025-10-20

Payment Page:

[Dashboard](#) [Book Events](#) [My Bookings](#) [Feedback](#) [Logout](#)

Payments

Pending Payments

Booking	Event	Date	Amount	Status	Action
1	FORTNITE FINALS	2025-10-20	₹300.00	✓ Paid	Completed

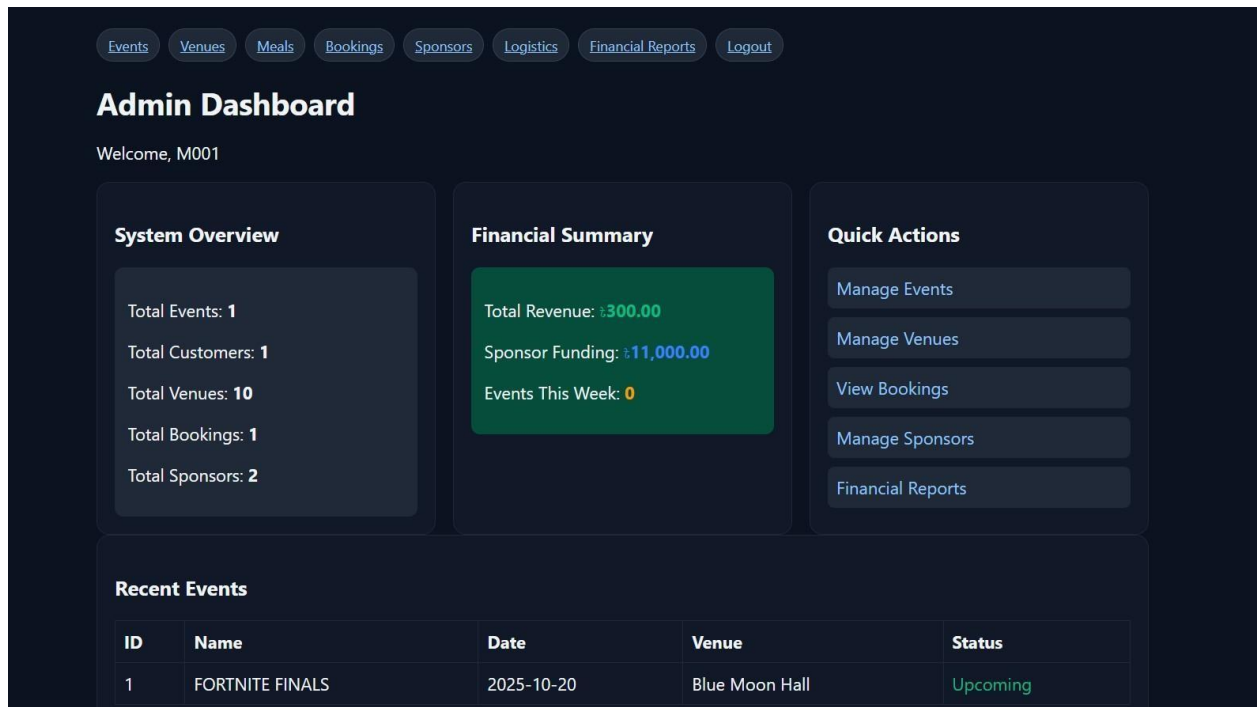
Payment History

Payment ID	Event	Date	Amount	Method	Details
P406	FORTNITE FINALS	2025-10-20	₹300.00	Bkash	Food: ₹120.00 Venue: ₹25000.00

Payment Information

Accepted Payment Methods:

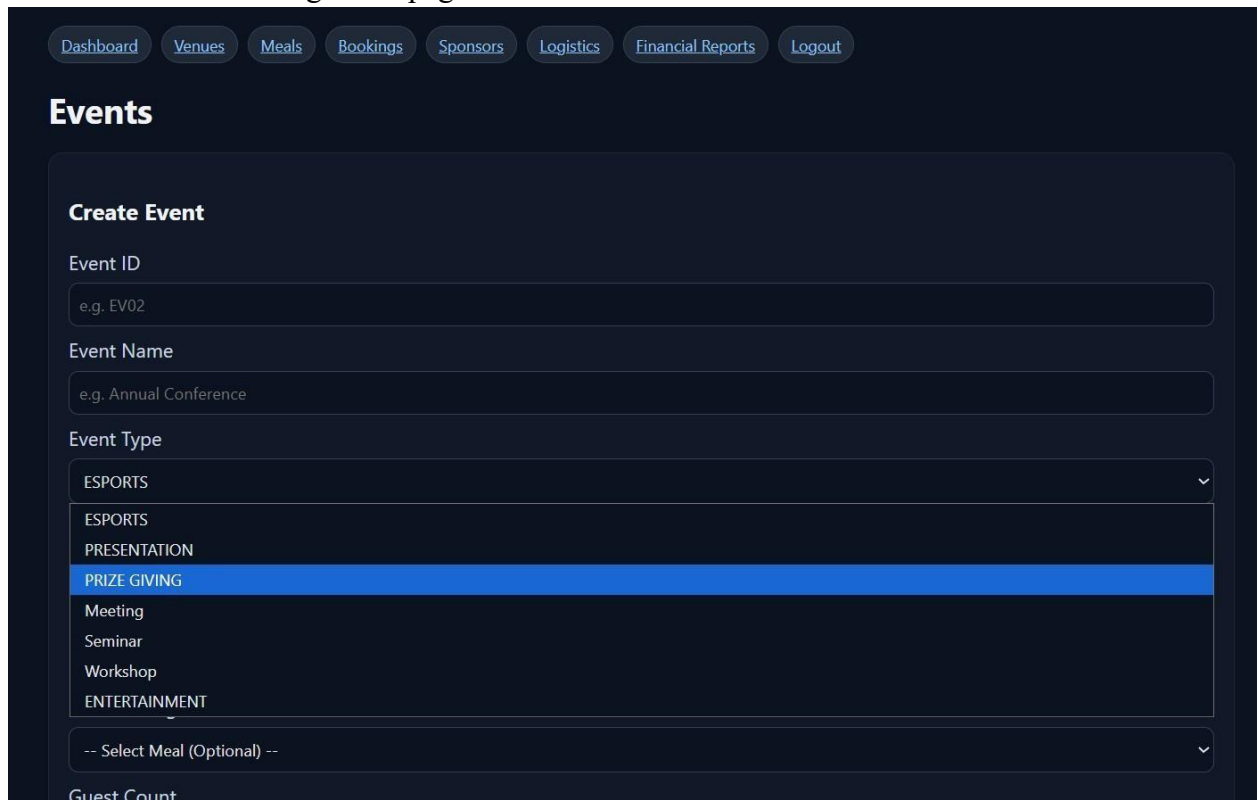
Admin Side:



The Admin Dashboard features a top navigation bar with links to Events, Venues, Meals, Bookings, Sponsors, Logistics, Financial Reports, and Logout. The main content area is divided into three columns: System Overview, Financial Summary, and Quick Actions. The System Overview column displays statistics for Total Events (1), Total Customers (1), Total Venues (10), Total Bookings (1), and Total Sponsors (2). The Financial Summary column shows Total Revenue (₹300.00), Sponsor Funding (₹11,000.00), and Events This Week (0). The Quick Actions column provides buttons for Manage Events, Manage Venues, View Bookings, Manage Sponsors, and Financial Reports. Below these columns is a Recent Events section with a table listing events.

ID	Name	Date	Venue	Status
1	FORTNITE FINALS	2025-10-20	Blue Moon Hall	Upcoming


Event Creation and management page:




The Event Creation and management page includes a top navigation bar with links to Dashboard, Venues, Meals, Bookings, Sponsors, Logistics, Financial Reports, and Logout. The main content area is titled 'Events' and contains a 'Create Event' form. The form includes fields for Event ID (e.g., EV02), Event Name (e.g., Annual Conference), and Event Type (a dropdown menu with options: ESPORTS, PRESENTATION, PRIZE GIVING, Meeting, Seminar, Workshop, ENTERTAINMENT). Below the Event Type dropdown is a 'Select Meal (Optional)' dropdown menu. The Guest Count field is partially visible at the bottom.

Cashflow page:

[Dashboard](#)[Events](#)[Venues](#)[Meals](#)[Bookings](#)[Sponsors](#)[Logistics](#)[Logout](#)



Financial Reports & Cashflow




Financial Overview

Total Revenue: ₺300.00

Total Expenses: ₺25,120.00

Sponsorship: ₺11,000.00


Net Profit: ₺-13,820.00



Payment Methods

Bkash


1 payments | ₺300.00




Recent Transactions

Payment ID	Customer	Event	Amount	Method	Details
P406	sanbi C001	N/A No booking	₺300.00	Bkash	Food: ₺120.00 Venue: ₺25000.00 Sponsor: ₺0.00

Logistics page:



Logistics & Equipment Management




Equipment Overview

Total Equipment: 0

Available: 0

In Use: 0



+ Add Equipment

Venue

V016 - Crystal Dome

-- Select Venue --

V011 - Blue Moon Hall

V016 - Crystal Dome

V014 - Diamond Convention

V013 - Emerald Pavilion

V012 - Golden Crown Center


V018 - Magnolia Garden

V019 - Orchid Center

V015 - Rose Valley Hall

V020 - Sapphire Plaza


V017 - Star Light Auditorium



Equipment by Venue

No equipment registered. Add equipment above!


Deleting:

 **All Bookings**

Booking ID	Date	Event	Customer	Total	Status	Actions
1	2025-09-02	FORTNITE FINALS 1 - 2025-10-20	sanbi C001	₹300.00	Upcoming	<button>Delete</button>

Booking deleted successfully

Updating:

 **My Profile**

Customer ID: C001

Name: sanbi

Contact: 01888888888


Address: mohammadpur

Full Name

Address

Contact Number

Update Profile


 **Account Statistics**

Total Bookings: **0**

Total Spent: **₹0.00**

Guests Added: **1**

Reviews Given: **0**

 **Change Password**


Current Password

New Password

Confirm New Password

Change Password

Sponsors page:

 **Sponsorship Statistics**

Total Sponsors: **2**

Total Funding: **₺11,000.00**

Average Funding: **₺5,500.00**

+ Add New Sponsor


Sponsor ID

Sponsor Address

Funding Amount

Assign to Event

Add Sponsor

 **All Sponsors**

7. Conclusion

This project successfully implemented a comprehensive event management system that demonstrated practical application of database design principles, role-based authentication, and complex business logic while providing valuable experience in web application development and real-world problem solving.