

# ABC Event Planning

## **Project Title**

ABC Event Planning Event Management System

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## Executive Summary

In Project Step One, most of the feedback focused on our Entity Relationship Diagram and naming conventions, with some changes required in the project outline itself. Following the suggestions, we revised the entity names in both the outline and ERD, ensuring consistency with capitalization and making sure that the names themselves matched. The outline was revised such that the description of an entity's relationships followed the description of the entity's attributes, instead of listing the relationships between entities at the end. Furthermore, the `attendee_id` attribute was modified so that it was no longer unique when utilized as a foreign key in `task_assignments` or `event_has_attendees`. An `is_employee` attribute was added to the Attendees entity so demonstrate that the Attendees entity tracks all attendees, including employees, as the feedback detailed that it was unclear as to why an attendee would have a task associated with them.

Feedback received for Project Step Two urged us to be more clear about our entity relationships, leading us to add implementation details to each relationship (e.g. Events to tasks: 1:M relationship implemented by `event_id` as a FK in Tasks). We also modified our DDL.sql and DML.sql files according to the request for a more diverse data set and suggestions indicating that it was necessary to add *Foreign Key checks* and *autocommit*, as the files would not import without them. All our ID attributes were updated to auto increment, and FKs were revised from hardcoded values to now utilize subqueries.

In Project Step Three, feedback indicated incongruences with `Task_definitions` and `Task_assignments` between our outline, ERD, webpages, and schema. Thus, modifications were made to ensure consistency for all entities and relationships. `Task_assignments` was revised to now have an M:1 relationship to Events and Attendees, and `Task_definitions` only has a 1:M relationship to `Task_assignments`. Following the feedback, we revised our INSERT statements in the DDL.sql file to utilize auto increment instead of manually insert, and modified our DML.sql SELECT statements to use JOIN to correctly display our data on the web interface.

Project Step Four could not receive extensive feedback as we could not get our project not functional on the OSU web server nor was it functional on a local device. However, extensive revisions, including conversions from HTML to J2 format and modification of our back-end code, allowed us to get our project functional on the OSU server.

Following feedback from Project Step Five, users can no longer enter negative numbers for `total_attendees` in Events and `capacity` in Venues. Validation was also added into `phone_number` and email fields so that users are now required to enter valid inputs before submitting add or edit forms. We updated the status fields in the task definitions page to a drop-down option, and now also have Delete functional for task definitions. The feedback also indicated that the update form in task assignments should have a title to maintain consistency with the other pages and our cancel buttons were not functional. As such, we added the update title and ensured that cancel buttons

were functional across all pages. In addition, the remaining CRUD functionalities were implemented so that all entities and intersection tables have full CRUD capabilities.

## Project Outline

At ABC Event Planning, we need a database to help us effectively organize our events. As an event planning service, our team plans approximately 200 events annually across our 10 different locations. We typically earn \$2,000 in revenue per event. However, as our business has grown, we have expanded to new locations and as expected, the number of events we plan has begun to increase. As such, we are looking to change our Event Management System to increase overall operational effectiveness. This means improving the efficiency of organizing and tracking Events, in addition to managing the variety of Tasks deemed necessary for event success. Additionally, we would like to extrapolate useful information, such as clients' preferred Venues and strategies to promote client acquisition and retention. We also require a database to store our Attendees information in an organized and efficient manner.

# Database Outline, in Words

## *Outline of Entities*

**Events:** records basic event information, including name, date, location

- event\_id: int, not NULL, PK, AUTO\_INCREMENT
- event\_name: varchar(255), unique, not NULL
- event\_date: date, not NULL
- total\_attendees: int, not NULL
- venue\_id: int, not NULL, FK
- Relationships:
  - Events to Task\_assignments: 1:M relationship - there is one event that each task can be associated with, and multiple tasks related to each event.
  - Events to Attendees: M:N – there are many events for many attendees of each event
    - Intersection table, Events\_has\_attendees, exhibits the M:N relationship, where an event can have many attendees, and each attendee can attend many events.

**Task\_definitions:** records information about tasks required to be completed to ensure the event's success; tasks could include “check in with caterers” (which would be completed by an employee who is denoted as an Attendee of the Event) or “speech at 3:15pm”

- task\_id: int, not NULL, PK, AUTO\_INCREMENT
- task\_name: varchar(255), not NULL
- task\_description: TEXT, not NULL
- task\_status: varchar(255), not NULL
- Relationships:
  - There is a 1:M relationship between Task\_definitions and Task\_assignments – there is one task definition that each task assignment can be associated with, and multiple task assignments related to each task definition.

**Task\_assignments:** creates an assignment ID for a task, as well as 1) the ID of the original task details (from the Task\_definitions entity), 2) the event its associated with (found in the Events entity), and 3) the ID of the attendee that should complete the task

*Note: tasks can be completed by either a company representative or a non-associated attendee (information about specific attendee can be derived from FK attendee\_id and corresponding information in the Attendees entity).*

- assignment\_id: int, not NULL, PK, AUTO\_INCREMENT
- task\_id: int, not NULL, FK
- event\_id: int, not NULL, FK
- attendee\_id: int, FK
- Relationships:
  - Events to Task\_assignments: 1:M relationship - there is one event that each task can be associated with, and multiple tasks related to each event.
  - Attendees to Task\_assignment (Optional): 1:M – each attendee can be assigned many tasks
  - There is a 1:M relationship between Task\_definitions and Task\_assignments – there is one task definition that each task assignment can be associated with, and multiple task assignments related to each task definition.

**Event\_has\_attendees** intersection table for Event and Attendees

- event\_id: int, not NULL, FK
- attendee\_id: int, not NULL, FK
- Relationships:
  - Exhibits the M:N relationship between Events and Attendees, where an event can have many attendees, and each attendee can attend many events.

**Attendees:** records information about each individual attending the event, including whether they are an employee/company representative, or simply attending the event

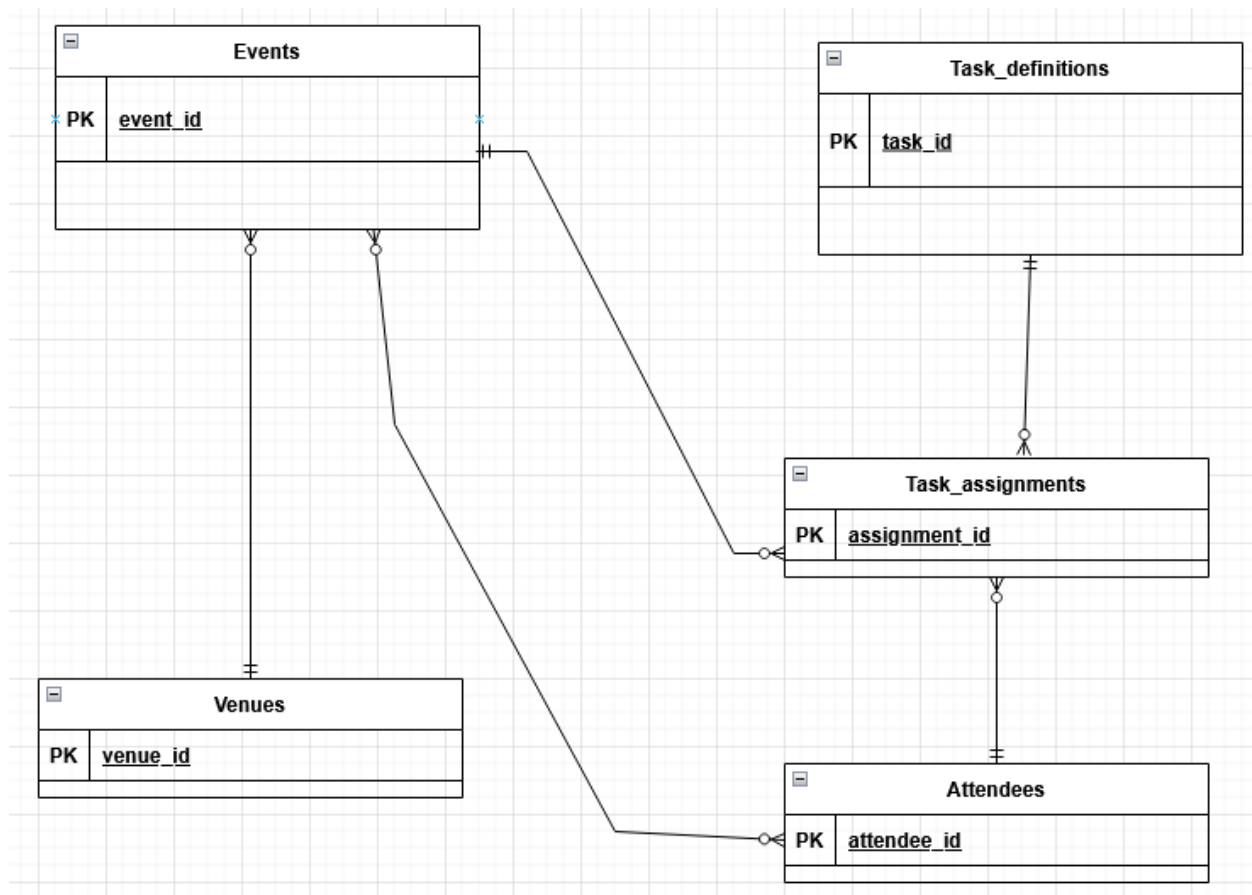
- attendee\_id: int, not NULL, PK, AUTO\_INCREMENT
- first\_name: varchar(255), not NULL
- last\_name: varchar(255), not NULL
- email: varchar(255), not NULL

- phone\_number: varchar(15), not NULL
- is\_employee: TINYINT(1), not NULL, default expression = 0
- Relationships:
  - Attendees to Events: M:N – there are many attendees for many events
  - Attendees to Task\_assignment (Optional): 1:M – each attendee can be assigned many tasks

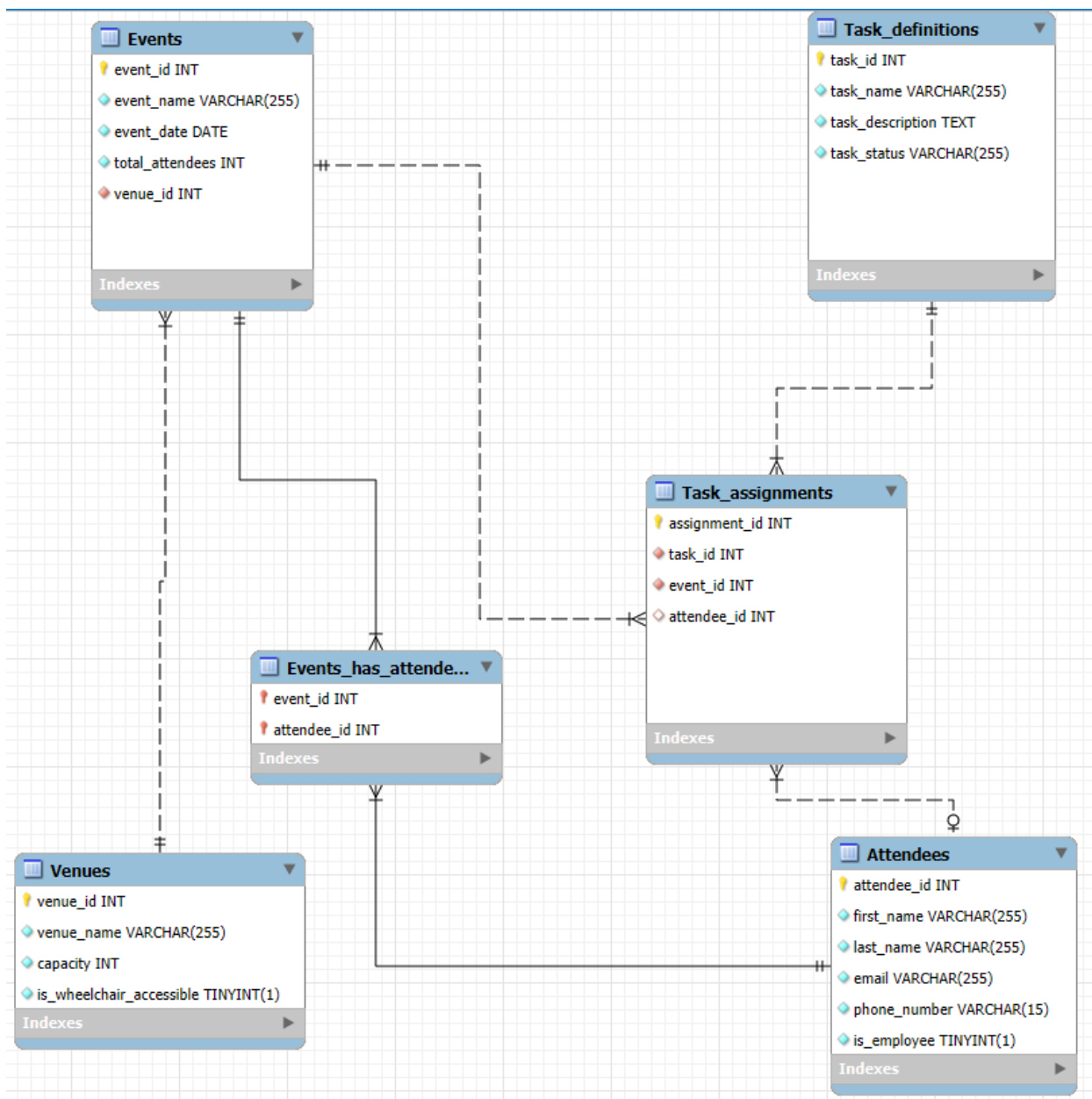
**Venues:** records information about venue

- venue\_id: int, not NULL, PK, AUTO\_INCREMENT
- venue\_name: varchar(255), not NULL
- capacity: int, not NULL
- is\_wheelchair\_accessible: TINYINT(1), not NULL, default expression = 1
- Relationships:
  - Venues to events: 1:M – it is possible for one venue to host many events.

## Entity-Relationship Diagram



## Schema





## Sample Data

Events_3NF				
event_id	event_name	event_date	total_attendees	venue_id
1	Tech Summit 2025	3/15/2025	200	1
2	Annual Gala Dinner	6/10/2025	150	2
3	AI Research Symposium	9/25/2025	250	3
4	Robotics Expo 2025	4/20/2025	300	4
5	Healthcare Innovation Forum	5/5/2025	180	5

Task_definitions_3NF			
task_id	task_name	description	task_status
1	Check in with caterers	Confirm catering services for event	Pending
2	Set up registration desk	Arrange materials and check-in lists	Completed
3	Keynote Speech Preparation	Ensure keynote speaker has necessary setup	In Progress
4	Tech Equipment Setup	Set up microphones, projectors, and laptops	Completed
5	Arrange Seating Plan	Organize seating for attendees	Pending

Task_assignments_3NF			
assignment_id	task_id	event_id	attendee_id
1	1	1	1
2	2	1	2
3	3	2	3
4	1	3	1
5	2	3	2

Events_has_attendees_3NF	
event_id	attendee_id
1	1
1	3
2	2
2	4
3	5

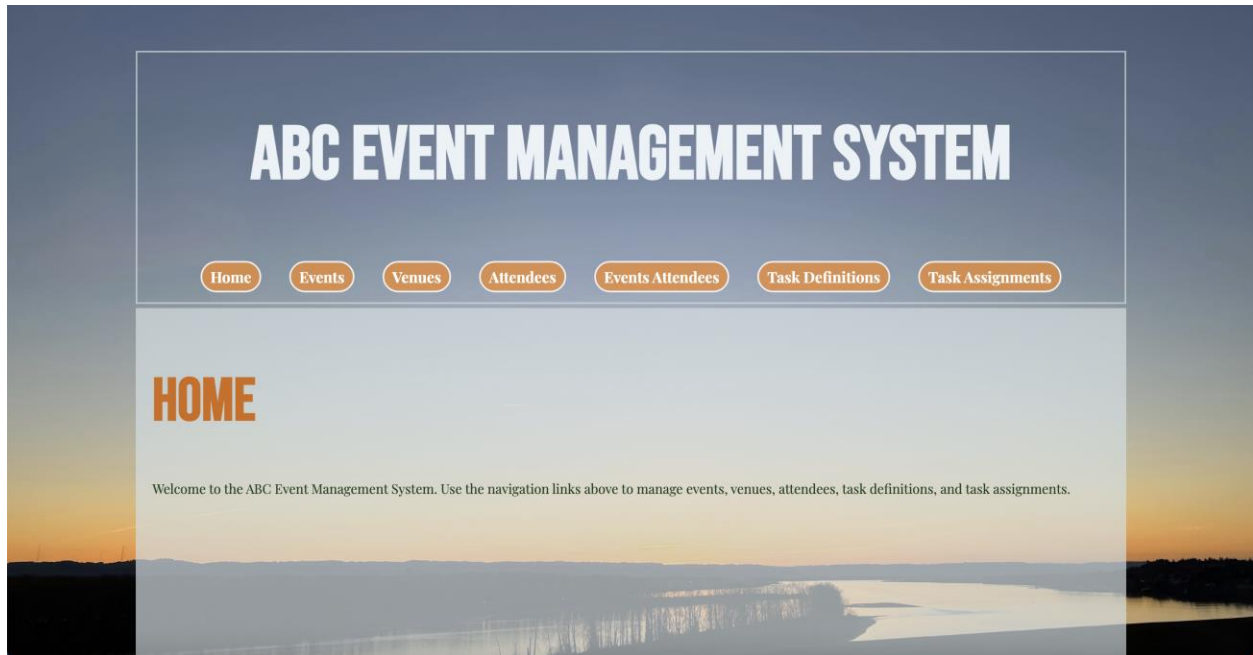
Attendees_3NF					
attendee_id	first_name	last_name	email	phone_number	is_employee
1	John	Doe	john.doe@email.com	555-111-1111	1
2	Alice	Smith	alice.smith@email.com	555-222-2222	1
3	Bob	Johnson	bob.johnson@email.com	555-333-3333	0
4	Emma	Brown	emma.brown@email.com	555-444-4444	1
5	Liam	Wilson	liam.wilson@email.com	555-555-5555	0

Venues_3NF			
venue_id	venue_name	capacity	is_wheelchair_accessible
1	Grand Hall	500	1
2	Conference Room A	100	1
3	Outdoor Pavilion	300	0
4	City Auditorium	600	1
5	Skyline Banquet Hall	250	1

## User-Interface

### HOME PAGE

Use the home page to navigate through the following entities: Events, Venues, Event\_has\_attendees (intersection table), Attendees, Task\_Definitions, and Task\_Assignments.



IMPORTANT NOTE: All Update [Entity] record forms are hidden until user selects to edit record

## MANAGE EVENTS PAGE

*Note: Global navigation allows users to navigate through the various “Manage [Entity]” pages*

*Figure below demonstrates CREATE, READ, UPDATE, and DELETE functionalities for Events entity*

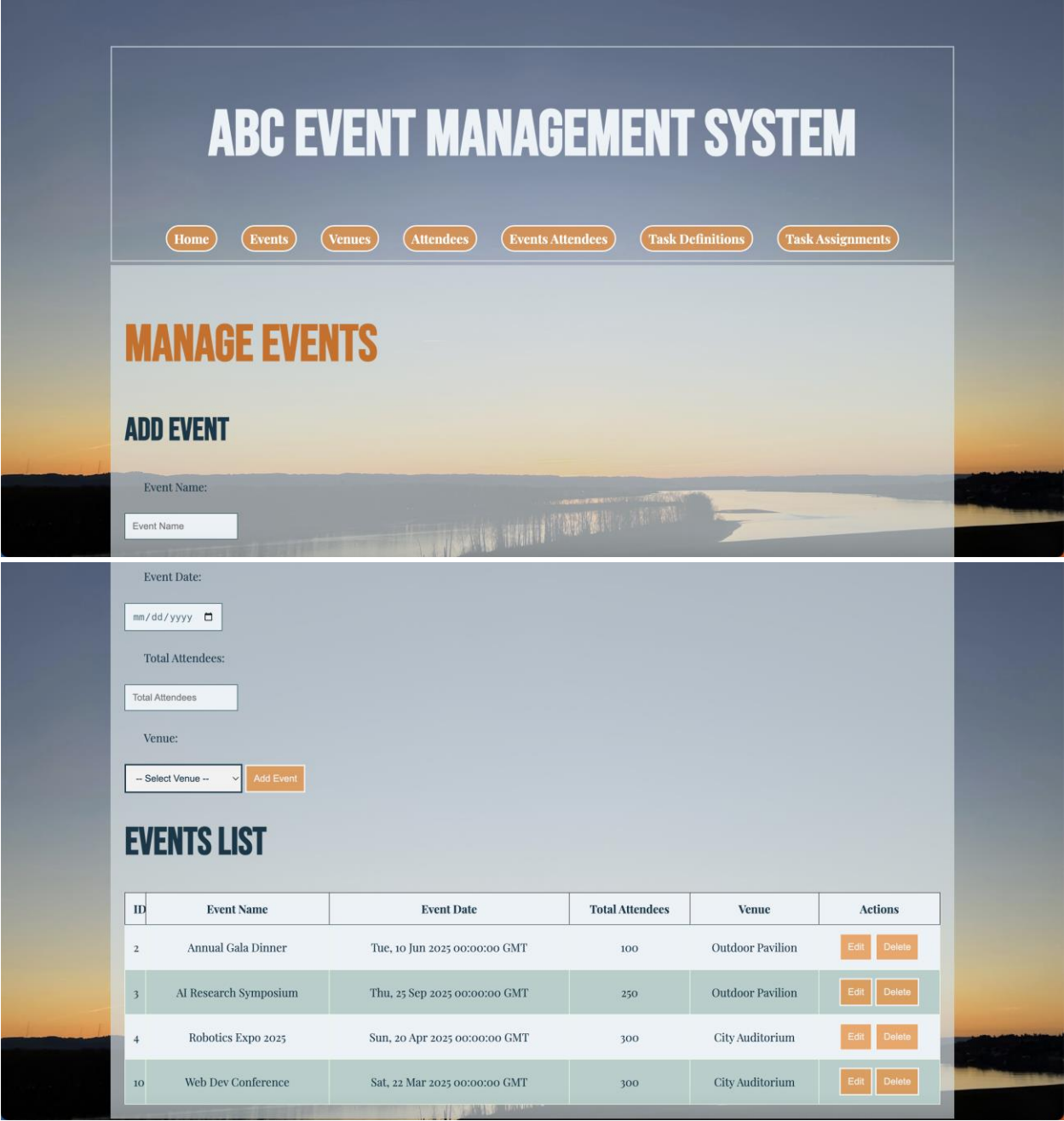


Figure below demonstrates Update functionality (hidden until user selects EDIT button)

-- Select Venue --

Add Event

## UPDATE EVENT

New Event Name:

Annual Gala Dinner

New Event Date:

06/10/2025

New Total Attendees:

100

New Venue:

Update Event

Cancel

## EVENTS LIST

ID	Event Name	Event Date	Total Attendees	Venue	Actions
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## MANAGE VENUES PAGE

Figure below demonstrates CREATE, READ, UPDATE and DELETE functionalities for Venues entity

HomeEventsVenuesAttendeesEvents AttendeesTask DefinitionsTask Assignments

# MANAGE VENUES

## ADD VENUE

Venue Name:

Capacity:

☐ Wheelchair Accessible

## UPDATE VENUE

New Venue Name:

New Capacity:

☒ Wheelchair Accessible

## VENUES LIST

ID	Venue Name	Capacity	Wheelchair Accessible	Actions
2	Conference Room 1	100	Yes	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
3	Outdoor Pavilion	300	No	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
4	City Auditorium	600	Yes	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
5	Skyline Banquet Hall	250	Yes	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
14	meow	1	No	<input type="button" value="Edit"/> <input type="button" value="Delete"/>

## MANAGE ATTENDEES PAGE

Figure below demonstrates CREATE, READ, UPDATE and DELETE functionalities for Attendees

# MANAGE ATTENDEES

## ADD ATTENDEES

First Name:

Last Name:

Email:

Phone Number:

☐ Is Employee

## UPDATE ATTENDEE

New First Name:

New Last Name:

New Email:

New Phone Number:

☐ Is Employee

## ATTENDEES LIST

ID	First Name	Last Name	Email	Phone Number	Is Employee	Actions
2	Alice	Smith	alice.smith@email.com	555-222-2222	No	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
4	Emma	Brown	emma.brown@email.com	555-444-4444	Yes	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
5	Liam	Wilson	liam.wilson@email.com	555-555-5555	No	<input type="button" value="Edit"/> <input type="button" value="Delete"/>

## MANAGE EVENT ATTENDEES PAGE (for event\_has\_attendees intersection table)

Figure below demonstrates CREATE, READ, UPDATE and DELETE functionalities for Event\_has\_attendees

## MANAGE EVENT ATTENDEES

### ADD ATTENDEE TO EVENT

Event:

-- Select Event --

Attendee:

-- Select Assignee --

Add Event Attendee

### UPDATE EVENT ATTENDEE

New Event:

Annual Gala Dinner

New Attendee:

Alice Smith

Update Event Attendee

Cancel

### EVENT ATTENDEES

Event ID	Event Name	Attendee ID	Attendee Name	Actions	
2	Annual Gala Dinner	2	Alice Smith	Edit	Remove
2	Annual Gala Dinner	4	Emma Brown	Edit	Remove
2	Annual Gala Dinner	5	Liam Wilson	Edit	Remove
4	Robotics Expo 2025	4	Emma Brown	Edit	Remove

## MANAGE TASK DEFINITIONS PAGE

Figure below demonstrates CREATE, READ, UPDATE and DELETE functionalities for Task\_definitions



## MANAGE TASK DEFINITIONS

### ADD TASK DEFINITION

Task Name:

Task Name

Task Description:

Task Description

Task Status:

-- Task Status --

Add Task

### UPDATE TASK DEFINITION

New Task Name:

Check in with caterers

New Task Description:

Confirm catering services for event

New Task Status:

Pending

Update Task

Cancel

### TASK DEFINITIONS LIST

ID	Task Name	Description	Status	Actions
1	Check in with caterers	Confirm catering services for event	Pending	<div>EditDelete</div>
9	Check lighting	Make sure the stage lights work	Completed	<div>EditDelete</div>
8	Coordinate sponsors	new task definition	Pending	<div>EditDelete</div>
3	Keynote Speech Preparation	Ensure keynote speaker has necessary setup	In Progress	<div>EditDelete</div>
4	Tech Equipment Setup	Set up microphones, projectors, and laptops	Completed	<div>EditDelete</div>

## MANAGE TASK ASSIGNMENT PAGE

Figure below demonstrates *CREATE*, *READ*, *UPDATE* and *DELETE* functionalities for *Task\_assignments*

# MANAGE TASK ASSIGNMENTS

## ADD TASK ASSIGNMENT

Task:

Event:

Assignee:

## UPDATE TASK ASSIGNMENT

Task:

Event:

Assignee:

## TASK ASSIGNMENT LIST

ID	Task	Event	Assignee	Actions	
3	Coordinate sponsors	Annual Gala Dinner	Alice Smith	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
4	Tech Equipment Setup	Robotics Expo 2025	Emma Brown	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
8	Check in with caterers	AI Research Symposium	Emma Brown	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
9	Keynote Speech Preparation	Web Dev Conference	Liam Wilson	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>