CONFERENCE REGISTRATION SYSTEM

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PROJECT OVERVIEW

System Description
A web-based platform for online conference and workshop .registration
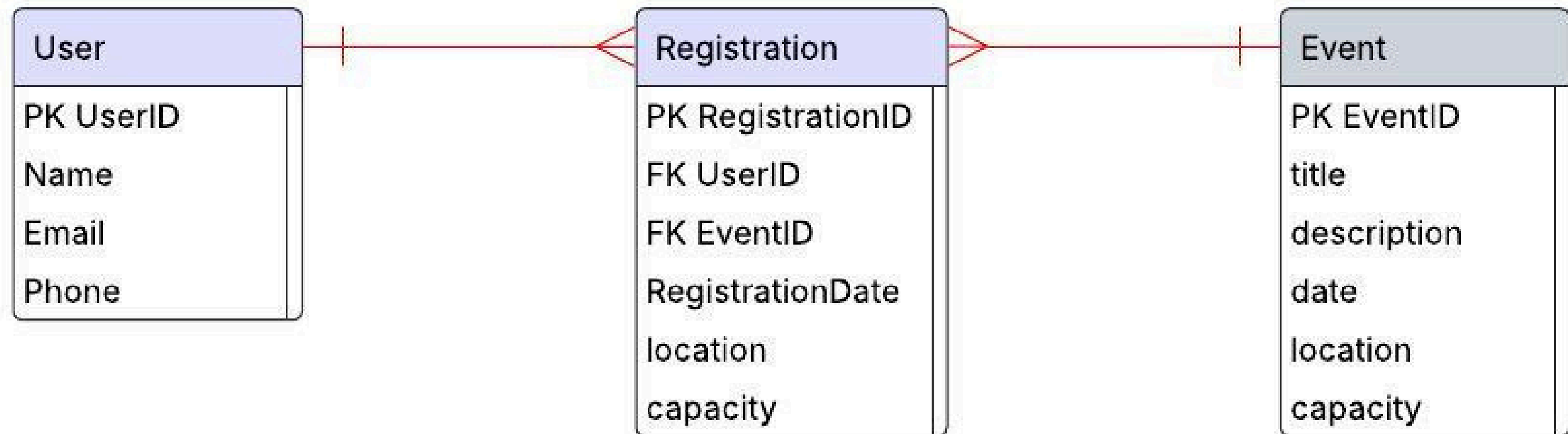
Domain
Education and Event Management sectors.

Problem it Solves:
Manual registration for conferences is slow and inefficient. This system automates the entire registration process for both users and organizers.

ER DIAGRAM

User
PK UserID
Name
Email
Phone

Registration
PK RegistrationID
FK UserID
FK EventID
RegistrationDate
location
capacity

Event
PK EventID
title
description
date
location
capacity

RELATIONAL SCHEMA

conference_system

event

Column	Type	Null	Default	Comments
EventID *(Primary)*	int	No		
Title	varchar(100)	No		
Description	text	Yes	NULL	
Date	date	No		
Location	varchar(100)	Yes	NULL	
Capacity	int	No		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	EventID	3	A	No	

registration

Column	Type	Null	Default	Comments
RegistrationID *(Primary)*	int	No		
UserID	int	Yes	NULL	
EventID	int	Yes	NULL	

RELATIONAL SCHEMA

Column	Type	Null	Default	Comments
RegistrationDate	date	No		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	RegistrationID	6	A	No	
UserID	BTREE	Yes	No	UserID		A	Yes	
				EventID		A	Yes	
EventID	BTREE	No	No	EventID	3	A	Yes	

user

Column	Type	Null	Default	Comments
UserID (Primary)	int	No		
FullName	varchar(100)	No		
Email	varchar(100)	No		
Phone	varchar(15)	Yes	NULL	

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	UserID	6	A	No	
Email	BTREE	Yes	No	Email	6	A	No	

NORMALIZATION

NF1 Eliminated repeating groups; ensured atomic values.

NF2 Removed partial dependencies on primary keys.

NF3 Removed transitive dependencies to enhance data integrity.

APPLICATION INTERFACE
HOME PAGE

Available Conferences & Workshops

Title	Date	Location	Capacity	Action
Web Development Workshop	2025-05-01	Baghdad Tech Center	50	Register
Photography Masterclass	2025-05-03	Al-Mansour Hall	30	Register
AI Conference	2025-05-05	University Hall	100	Register

APPLICATION INTERFACE
REGISTRATION FORM

Register for the Event

Full Name

Email

Phone

Register

APPLICATION INTERFACE
ADMIN DASHBOARD / CONFERENCE LIST

Server: MySQL:3306 » Database: conference_system

Structure	SQL	Search	Query	Export	Import	Operations	Privileges	Routines	Events

Filters

Containing the word:

	Table ▲	Action								Rows	Type	Collation	Size	Overhead
☐	event	☆	📋 Browse	📈 Structure	🔍 Search	Insert	🗑 Empty	⊘ Drop		3	MyISAM	utf8mb3_general_ci	2.3 KiB	-
☐	registration	☆	📋 Browse	📈 Structure	🔍 Search	Insert	🗑 Empty	⊘ Drop		6	MyISAM	utf8mb3_general_ci	4.1 KiB	-
☐	user	☆	📋 Browse	📈 Structure	🔍 Search	Insert	🗑 Empty	⊘ Drop		6	MyISAM	utf8mb3_general_ci	5.3 KiB	-
	3 tables	Sum								15	MyISAM	utf8mb3_general_ci	11.7 KiB	0 B

☐ Check all   With selected: ▼

🖨 Print   📇 Data dictionary

📋 Create new table

EVENT TABLE

EventID	Title	Description	Date	Location	Capacity
1	Web Development Workshop	Learn HTML, CSS, and JS from scratch	2025-05-01	Baghdad Tech Center	50
2	Photography Masterclass	Advanced tips and live demo with pro photographers	2025-05-03	Al-Mansour Hall	30
3	AI Conference	Discussing the future of Artificial Intelligence	2025-05-05	University Hall	100

USER TABLE

UserID	FullName	Email	Phone
1	Ali Kareem	ali.kareem@example.com	07801234567
2	abdullah	ao350360@gmail.com	07716002742
3	ali	ali@exambil.com	07716002741
4	ahmed	ahmed@exambil.com	07716002740
5	anas	anas@exambil.com	07716002739
6	azhar	azhar@exambil.com	07716002738
7	omar	omar@exambil.com	07716002734
8	aws	aws@exambil.com	07716002734
9	yahya	yahya@exambil.com	07716002733
10	ahmed	ahmeda@exambil.com	07716002732

REGISTRATION TABLE

RegistrationID	UserID	EventID	RegistrationDate
1	1	2	2025-04-20
2	2	1	2025-04-20
3	3	1	2025-04-20
4	4	3	2025-04-20
5	5	1	2025-04-20
6	6	2	2025-04-20
7	7	1	2025-04-22
8	8	1	2025-04-23
9	9	3	2025-04-23
10	10	1	2025-04-23

QUERIES & OPERATIONS

QUERIES & OPERATIONS

1- SHOW USERS AND THEIR REGISTERED EVENTS

```
mysql> SELECT user.FullName, event.Title
    -> FROM user
    -> JOIN registration ON user.UserID = registration.UserID
    -> JOIN event ON event.EventID = registration.EventID;
+------------+--------------------------+
| FullName   | Title                    |
+------------+--------------------------+
| abdullah   | Web Development Workshop |
| ali        | Web Development Workshop |
| anas       | Web Development Workshop |
| omar       | Web Development Workshop |
| aws        | Web Development Workshop |
| ahmed      | Web Development Workshop |
| Ali Kareem | Photography Masterclass  |
| azhar      | Photography Masterclass  |
| ahmed      | AI Conference            |
| yahya      | AI Conference            |
+------------+--------------------------+
10 rows in set (0.00 sec)
```

QUERIES & OPERATIONS

2- COUNT THE NUMBER OF REGISTRATIONS FOR EACH EVENT

```
mysql> SELECT event.Title, COUNT(*) AS NumberOfRegistrations
    -> FROM event
    -> JOIN registration ON event.EventID = registration.EventID
    -> GROUP BY event.EventID;
+--------------------------+-----------------------+
| Title                    | NumberOfRegistrations |
+--------------------------+-----------------------+
| Web Development Workshop |                     6 |
| Photography Masterclass  |                     2 |
| AI Conference            |                     2 |
+--------------------------+-----------------------+
3 rows in set (0.00 sec)
```

QUERIES & OPERATIONS

3- INSERT A NEW REGISTRATION

```
mysql>
mysql> INSERT INTO registration (UserID, EventID, RegistrationDate)
    -> VALUES (3, 2, '2025-04-25');
Query OK, 1 row affected (0.00 sec)

mysql>
mysql>
mysql> select * from registration
    -> ;
+----------------+--------+---------+------------------+
| RegistrationID | UserID | EventID | RegistrationDate |
+----------------+--------+---------+------------------+
|              1 |      1 |       2 | 2025-04-20       |
|              2 |      2 |       1 | 2025-04-20       |
|              3 |      3 |       1 | 2025-04-20       |
|              4 |      4 |       3 | 2025-04-20       |
|              5 |      5 |       1 | 2025-04-20       |
|              6 |      6 |       2 | 2025-04-20       |
|              7 |      7 |       1 | 2025-04-22       |
|              8 |      8 |       1 | 2025-04-23       |
|              9 |      9 |       3 | 2025-04-23       |
|             10 |     10 |       1 | 2025-04-23       |
|             11 |      3 |       2 | 2025-04-25       |
+----------------+--------+---------+------------------+
11 rows in set (0.00 sec)
```

QUERIES & OPERATIONS

4- UPDATE A USER'S PHONE NUMBER

```
mysql> UPDATE user
    -> SET Phone = '07801234500'
    -> WHERE UserID = 1;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from user;
+--------+------------+---------------------------+-------------+
| UserID | FullName   | Email                     | Phone       |
+--------+------------+---------------------------+-------------+
|      1 | Ali Kareem | ali.kareem@example.com    | 07801234500 |
|      2 | abdullah   | ao350360@gmail.com        | 07716002742 |
|      3 | ali        | ali@exambil.com           | 07716002741 |
|      4 | ahmed      | ahmed@exambil.com         | 07716002740 |
|      5 | anas       | anas@exambil.com          | 07716002739 |
|      6 | azhar      | azhar@exambil.com         | 07716002738 |
|      7 | omar       | omar@exambil.com          | 07716002734 |
|      8 | aws        | aws@exambil.com           | 07716002734 |
|      9 | yahya      | yahya@exambil.com         | 07716002733 |
|     10 | ahmed      | ahmeda@exambil.com        | 07716002732 |
+--------+------------+---------------------------+-------------+
10 rows in set (0.00 sec)
```

QUERIES & OPERATIONS

5- DELETE A USER

```
mysql> DELETE FROM user
    -> WHERE UserID = 10;
Query OK, 1 row affected (0.00 sec)

mysql> select * from user;
+--------+-----------+------------------------+-------------+
| UserID | FullName  | Email                  | Phone       |
+--------+-----------+------------------------+-------------+
|      1 | Ali Kareem| ali.kareem@example.com | 07801234500 |
|      2 | abdullah  | ao350360@gmail.com     | 07716002742 |
|      3 | ali       | ali@exambil.com        | 07716002741 |
|      4 | ahmed     | ahmed@exambil.com      | 07716002740 |
|      5 | anas      | anas@exambil.com       | 07716002739 |
|      6 | azhar     | azhar@exambil.com      | 07716002738 |
|      7 | omar      | omar@exambil.com       | 07716002734 |
|      8 | aws       | aws@exambil.com        | 07716002734 |
|      9 | yahya     | yahya@exambil.com      | 07716002733 |
+--------+-----------+------------------------+-------------+
9 rows in set (0.00 sec)
```

QUERIES & OPERATIONS

6- SHOW ALL REGISTRATIONS FOR A SPECIFIC USER

```
mysql> SELECT event.Title, registration.RegistrationDate
    -> FROM event
    -> JOIN registration ON event.EventID = registration.EventID
    -> WHERE registration.UserID = 2;
+-------------------------+------------------+
| Title                   | RegistrationDate |
+-------------------------+------------------+
| Web Development Workshop | 2025-04-20      |
+-------------------------+------------------+
1 row in set (0.00 sec)
```

QUERIES & OPERATIONS

7- SHOW ALL USERS REGISTERED FOR A SPECIFIC EVENT

```
mysql> SELECT user.FullName, user.Email
    -> FROM user
    -> JOIN registration ON user.UserID = registration.UserID
    -> JOIN event ON event.EventID = registration.EventID
    -> WHERE event.EventID = 1;
+----------+----------------------+
| FullName | Email                |
+----------+----------------------+
| abdullah | ao350360@gmail.com   |
| ali      | ali@exambil.com      |
| anas     | anas@exambil.com     |
| omar     | omar@exambil.com     |
| aws      | aws@exambil.com      |
+----------+----------------------+
5 rows in set (0.00 sec)
```

CHALLENGES & LESSONS LEARNED

CHALLENGES:
1- Importing the database using SQL
2- Initial issues displaying the database
3- Handling foreign key constraints

LESSONS LEARNED:
1- Better understanding of relational databases
2- Improved skills in SQL joins and constraints
3- Learned how to connect PHP pages with MySQL database

Thank You

Thank you for your attention

Any questions?