

University of British Columbia, Vancouver

Department of Computer Science

CPSC 304 Project Cover Page

Milestone #: 4

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Group Number: 118

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

Milestone 4

a. Project summary:

The Event Management database supports event planning, sponsorship management, attendee engagement, and financial transactions. All elements of the database collaborate to create a holistic ecosystem that caters to the diverse needs of event organizers, staff, and attendees across various event types and scales. The system is designed to streamline event operations, enhance external partnerships, and provide attendees with an enjoyable event experience.

b. Description of how our final schema differed from the schema we turned in:

We eliminated the eventnames table that we had before and added an eventname field to the event table. This is because in the previous iteration, we would have to know the venue id and date of an event in order to know its name. Having the eventname included into the event table made the data more cohesive and understandable.

The rest of the schema remained mostly the same, but we added constraints on some fields. For example, in the Customer table, we made the customer phone number and email not null, whereas it previously did not have any constraints.

c. A copy of the schema and screenshots that show what data is present in each relation after the SQL script from item #2 is run:

1. Facility(venueType, amenities):

VENUETYPE	AMENITIES
conference room	audiovisual, wi-fi, seating, whiteboard, air-conditioning
banquet hall	audiovisual, wi-fi, seating, stage, air-conditioning
theatre	seating, sound, screen, concessions, accessibility
arena	seating, sound, lighting, concessions, lockers, first aid station
stadium	seating, sound, lighting, concessions, vip suites, sports bars

2. Rent(venueType, capacity, venuePrice):

VENUETYPE	CAPACITY	VENUEPRICE
conference room	50	200
conference room	200	500
banquet hall	100	500
banquet hall	500	1000
theatre	500	2000
theatre	1000	5000
arena	10000	5000
arena	30000	20000
stadium	30000	30000
stadium	50000	50000

3. Venue(venueID, venueName, venueAddress, capacity, venueType)

VENUEID	VENUENAME	VENUEADDRESS	CAPACITY	VENUETYPE
1	city arena	123 main street	10000	arena
2	hillside stadium	456 elm street	30000	stadium
3	grand theater	789 oak avenue	1000	theatre
4	elegant banquet hall	222 rose lane	100	banquet hall
5	downtown convention center	101 maple drive	50	conference room

4. Seat(venueID, seatNum, seatType):

VENUEID	SEATNUM	SEATTYPE
1	a101	vip
1	a102	vip
2	section 1, row a, seat 1	standard
3	section d, seat 1	standard
3	section b, seat 10	vip

5. Event(eventID, venueID, dateTime, eventName):

EVENTID	VENUEID	DATETIME	EVENTNAME
1	1	20-OCT-23 06.00.00.000000 PM	grand opening gala
2	2	15-NOV-23 02.30.00.000000 PM	music festival
3	3	05-DEC-23 07.00.00.000000 PM	shakespearean play
4	4	30-NOV-23 08.00.00.000000 PM	annual awards ceremony
5	5	25-OCT-23 10.00.00.000000 AM	tech conference

6. Genre(performer, genre):

PERFORMER	GENRE
taylor swift	pop
coldplay	alternative

7. Concert(eventID, performer):

EVENTID	PERFORMER
1	taylor swift
2	coldplay

8. Play(eventID, director):

EVENTID	DIRECTOR
3	john smith
4	sarah johnson

9. Conference(eventID, host):

EVENTID	HOST
5	techcorp

10. TicketPrice(ticketType, eventID, ticketPrice):

TICKETTYPE	EVENTID	TICKETPRICE
ga	1	50
vip	1	150
standard	2	40
student	2	25
regular	3	30

11. TicketStatus(transID, status):

TRANSID	STATUS
2128292	sold
2128293	pending
1849354	sold
2128973	sold
3127543	sold
3127542	sold
3127541	sold
4904532	sold
5012394	sold

12. Ticket(ticketID, ticketType, eventID, transID):

TICKETID	TICKETTYPE	EVENTID	TRANSID
389	regular	3	5012394
390	regular	3	2128293
1578	ga	1	1849354
1580	ga	1	1849354
2908	vip	1	2128973
2909	vip	1	2128292
14934	student	2	4904532
28095	standard	2	3127541
28096	standard	2	3127542
28097	standard	2	3127543

13. Transaction(transID, paymentMethod, **custID**):

TRANSID	PAYMENTMETHOD	CUSTID
2128292	credit card	2000
2128293	credit card	2000
1849354	credit card	3000
2128973	cash	4000
3127543	paypal	5000
3127542	paypal	5000
3127541	paypal	5000
4904532	paypal	6000
5012394	credit card	1000

14. CustomerTier(loyaltyPoints, tier):

LOYALTYPOINTS	TIER
0	bronze
500	silver
1000	gold
2000	platinum
5000	diamond

15. Customer(custID, custName, custAddress, custPhone, custEmail, **loyaltyPoints**)

CUSTID	CUSTNAME	CUSTADDRESS	CUSTPHONE	CUSTEMAIL	LOYALTYPOINTS
2000	jane doe	123 main street	555-555-5555	janedoe@example.com	0
3000	john doe	123 main street	555-123-4567	johndoe@example.com	500
4000	alice smith	456 elm road	555-987-6543	alice@example.com	1000
5000	bob johnson	789 oak avenue	555-456-7890	bob@example.com	1000
6000	eva williams	321 pine lane	555-234-5678	eva@example.com	2000
1000	david brown	567 cedar drive	555-876-5432	david@example.com	5000

16. Sponsor(sponsID, sponsName, sponsAddress, sponsPhone, sponsEmail)

SPONSID	SPONSNAME	SPONSADDRESS	SPONSPHONE	SPONSEMAIL
1	abc corporation	123 main street	555-123-4567	abc@example.com
2	xyz ltd	456 elm road	555-987-6543	xyz@example.com
3	sample corp	789 oak avenue	555-456-7890	sample@example.com
4	global solutions	321 pine lane	555-234-5678	global@example.com
5	mega corp	567 cedar drive	555-876-5432	mega@example.com

17. Sponsorship(eventID, sponsorID, fund):

EVENTID	SPONSID	FUND
1	1	5000
1	2	3000
2	3	8000
3	4	6000
4	5	7500

18. Staff(staffID, staffName, staffAddress, staffPhone, staffEmail)

STAFFID	STAFFNAME	STAFFADDRESS	STAFFPHONE	STAFFEMAIL
1	john smith	123 main street	555-123-4567	john@example.com
2	jane doe	456 elm road	555-987-6543	jane@example.com
3	robert johnson	789 oak avenue	555-456-7890	robert@example.com
4	sara wilson	321 pine lane	555-234-5678	sara@example.com
5	david brown	567 cedar drive	555-876-5432	david@example.com

19. Assignment(eventID, staffID, role):

EVENTID	STAFFID	ROLE
1	1	coordinator
2	1	coordinator
3	1	coordinator
4	1	assistant
5	1	manager
1	2	assistant
2	3	coordinator
1	4	coordinator
2	4	coordinator
3	4	manager
4	4	assistant
EVENTID	STAFFID	ROLE
5	4	manager
4	5	technician

d. All SQL queries:

INSERT

Query:

```
INSERT INTO sponsor (sponsid, sponsname, sponsaddress, sponsphone,
sponsemail)
VALUES ($sponsID, '$sponsName', '$sponsAddress', '$sponsPhone',
'$sponsEmail');
```

Location: event_manager.php, line 340

Before:

All Sponsors

Sponsor ID	Sponsor Name	Sponsor Address	Sponsor Phone	Sponsor Email
1	abc corporation	123 main street	555-123-4567	abc@example.com
2	xyz ltd	456 elm road	555-987-6543	xyz@example.com
3	sample corp	789 oak avenue	555-456-7890	sample@example.com
4	global solutions	321 pine lane	555-234-5678	global@example.com
5	mega corp	567 cedar drive	555-876-5432	mega@example.com

During:

After:

All Sponsors

Add New Sponsor

Sponsor ID:

Sponsor Name:

Sponsor Address:

Sponsor Phone:

Sponsor Email:

Event ID:

Fund:

Sponsor ID	Sponsor Name	Sponsor Address	Sponsor Phone	Sponsor Email
6	new sponsor	765 new street	123-456-7890	new@example.com
1	abc corporation	123 main street	555-123-4567	abc@example.com
2	xyz ltd	456 elm road	555-987-6543	xyz@example.com
3	sample corp	789 oak avenue	555-456-7890	sample@example.com
4	global solutions	321 pine lane	555-234-5678	global@example.com
5	mega corp	567 cedar drive	555-876-5432	mega@example.com

DELETE

Query:

```
DELETE FROM event WHERE eventID = $eventID;
```

Location: event_manager.php, line 288

Before:

All Events

Event ID	Venue ID	Date Time	Event Name
1	1	2023-10-20 18:00:00	grand opening gala
2	2	2023-11-15 14:30:00	music festival
3	3	2023-12-05 19:00:00	shakespearean play
4	4	2023-11-30 20:00:00	annual awards ceremony
5	5	2023-10-25 10:00:00	tech conference

During:

Delete Event

Event ID:

Delete

After:

All Events

Event ID	Venue ID	Date Time	Event Name
1	1	2023-10-20 18:00:00	grand opening gala
2	2	2023-11-15 14:30:00	music festival
4	4	2023-11-30 20:00:00	annual awards ceremony
5	5	2023-10-25 10:00:00	tech conference

UPDATE

Query:

```
UPDATE event SET venueid = $venueID
, datetime=timestamp' " . $formattedDatetime . "'
, eventname=' " . $eventName . "'
WHERE eventid = $eventID;
```

Location: event_manager.php, line 321

Before:

All Events

Event ID	Venue ID	Date Time	Event Name
1	1	2023-10-20 18:00:00	grand opening gala
2	2	2023-11-15 14:30:00	music festival
3	3	2023-12-05 19:00:00	shakespearean play
4	4	2023-11-30 20:00:00	annual awards ceremony
5	5	2023-10-25 10:00:00	tech conference

During:

Update Event

Event ID:

New Event Name:

New Venue ID:

New Date Time:

After:

All Events

Event ID	Venue ID	Date Time	Event Name
1	1	2023-10-20 18:00:00	grand opening gala
2	5	2023-11-30 14:00:00	another event
3	3	2023-12-05 19:00:00	shakespearean play
4	4	2023-11-30 20:00:00	annual awards ceremony
5	5	2023-10-25 10:00:00	tech conference

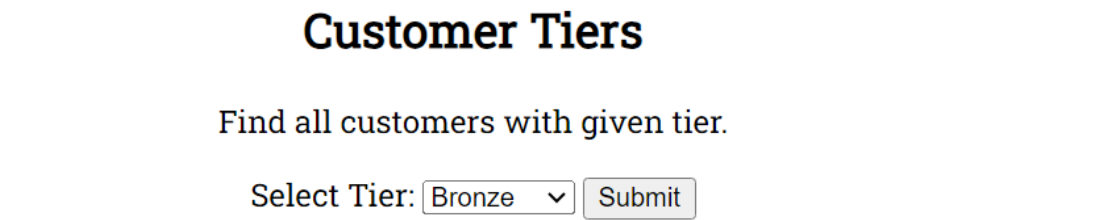
Selection

Query:

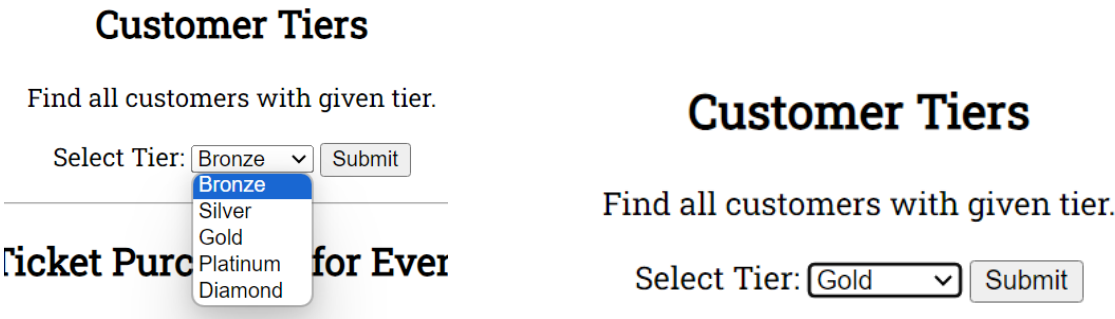
```
SELECT c.custid, c.custname, c.custaddress, c.custemail,
c.loyaltypoints
FROM customer c, customertier ct
WHERE c.loyaltypoints = ct.loyaltypoints and ct.tier = ' " . $tier .
" ' ;
```

Location: customerservice.php,line 185

Before:



During:



After:

Customer ID	Customer Name	Customer Address	Customer Phone	Loyalty Points
4000	alice smith	456 elm road	alice@example.com	1000
5000	bob johnson	789 oak avenue	bob@example.com	1000

Projection

Query:

```
SELECT $selectedAttributes --hr can choose different fields to view  
FROM staff;
```

Location: hr.php, line 149

Before:

Browse staff by:

- ☐ ID ☐ Name
☐ Address
☐ Phone
☐ Email

Show

During:

Browse staff by:

- ☒ ID ☒ Name
☐ Address
☐ Phone
☒ Email

Show

After:

staffid	staffname	staffemail
1	john smith	john@example.com
2	jane doe	jane@example.com
3	robert johnson	robert@example.com
4	sara wilson	sara@example.com
5	david brown	david@example.com

Join

Query:

```
SELECT distinct c.custid, c.custname, c.custemail
FROM customer c, transaction tr, ticket ti
WHERE c.custid = tr.custid
and tr.transid = ti.transid
and ti.eventid = $eventID;
```

Location: customerservice.php, line: 172

Before:

Ticket Purchased for Event

Find all customers that purchased tickets to the given event ID.

Event ID:

During:

Ticket Purchased for Event

Find all customers that purchased tickets to the given event ID.

Event ID:

After:

Customer ID	Customer Name	Customer Email
5000	bob johnson	bob@example.com
6000	eva williams	eva@example.com

Aggregation with GROUP BY

Query:

```
SELECT e.EVENTID
, e.EVENTNAME
, COUNT(s.SPONSID) AS TOTAL_SPONSORS
FROM event e
LEFT JOIN sponsorship s ON e.EVENTID = s.EVENTID
WHERE e.EVENTID IN (" . implode(",", $selectedEventIDs) . ")
GROUP BY e.EVENTID, e.EVENTNAME;
```

Location: event_manager.php, line 375

Before:

All Sponsorships

Event ID	Sponsor ID	Fund
1	1	5000
1	2	3000
2	3	8000
3	4	6000
4	5	7500

Total Sponsors By Event

Total number of sponsors of events:

- ☐ Event # 1: grand opening gala
- ☐ Event # 2: another event
- ☐ Event # 3: shakespearean play
- ☐ Event # 4: annual awards ceremony
- ☐ Event # 5: tech conference

Show

During:

Total Sponsors By Event

Total number of sponsors of events:

- ☒ Event # 1: grand opening gala
- ☐ Event # 2: another event
- ☒ Event # 3: shakespearean play
- ☒ Event # 4: annual awards ceremony
- ☐ Event # 5: tech conference

Show

After:

Event ID	Event Name	Total Sponsors
4	annual awards ceremony	1
3	shakespearean play	1
1	grand opening gala	2

Aggregation with HAVING

Query:

```
SELECT e.EVENTID
, e.EVENTNAME
, SUM(s.FUND) AS TOTAL_FUND
FROM event e, sponsorship s
WHERE e.EVENTID = s.EVENTID
GROUP BY e.EVENTID, e.EVENTNAME
HAVING SUM(s.FUND) $comparator $fund;
```

Location: event_manager.php, line 394

Before:

Total Funds By Event

All events whose fund is .

During:

Total Funds By Event

All events whose fund is .

After:

Event ID	Event Name	Total Fund
2	music festival	8000
4	annual awards ceremony	7500
1	grand opening gala	8000

Nested Aggregation with GROUP BY

Query:

```
SELECT t.custid, count(*) as count
FROM transaction t
GROUP BY t.custid
HAVING COUNT(*) >= all (SELECT COUNT(*)
                        FROM transaction t2
                        GROUP BY t2.custid);
```

Location: customerservice.php, line: 196

Before:

Greatest Number of Transactions

Find the customers that have made the greatest number of transactions.

After:

Customer ID	Number of Transactions
5000	3

Division

Query:

```
SELECT DISTINCT s.staffid, s.staffname
FROM staff s, assignment a
WHERE NOT EXISTS (
    SELECT e.eventid
    FROM event e
    WHERE NOT EXISTS (
        SELECT a.eventid
        FROM assignment a
        WHERE a.staffid = s.staffid
        AND a.eventid = e.eventid));
```

Location: hr.php, line: 170.

Before:

Find staffs who were assigned in all events:

Show

After:

STAFF MEMBERS WHO HAVE WORKED IN ALL EVENTS

Staff ID	Staff Name
4	sara wilson
1	john smith