University of British Columbia, Vancouver
Department of Computer Science

CPSC 304 Project Cover Page

Milestone #: 4

Date: December 1, 2023

Group Number: 128

Name	Student Number	CS Alias (Userid)	Preferred E-mail Address
Jason Zhu	98960727	n6v7c	zhujason4@gmail.com
Michael Cui	16721946	r4a2e	michaelcui11062003@gmail.com
Leo Wang	46986956	k0j9k	Leowang801@gmail.com

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

University of British Columbia, Vancouver
Department of Computer Science

Project Description

For our project, we have created a platform to manage events. The main relationship is between events and the venue that it will be hosted. The user will be able to perform operations on the data to access important information like how many total people can attend an event across all the venues that the event is performed in. There is also data about merchandisers, and staff at all events so that managers can easily see who will be working and what will be sold at each event and venue.

Our final scheme does not have any differences from the one we turned in. We found nothing that needed to be changed.

Schema

Entities

Guest(
    Email: VARCHAR,
    Name: VARCHAR,
    ticket #: INTEGER,
    phone #: INTEGER)

Event(
    Time: DATETIME,
    event ID: INTEGER,
    Name: VARCHAR,
    Description: TEXT)

Staff(
    Role: VARCHAR,
    Email: VARCHAR,
    Name: VARCHAR,
    staff ID: INTEGER,
    phone #: INTEGER)

Department(
    Name: VARCHAR,
    Description: TEXT,
    event ID: INTEGER)

Sponsor(
    sponsor name: VARCHAR,
    Amount: DOUBLE,
    Request: TEXT,

phone #: INTEGER,
Email: VARCHAR)

Performer(
Agent: VARCHAR,
Name: VARCHAR,
phone #: INTEGER,
Email: VARCHAR)

Venue(
Name: VARCHAR,
Address: VARCHAR,
Capacity: INTEGER,
event ID: INTEGER)

Vendor(
vendor name: VARCHAR,
Location: VARCHAR,
Hours: INTEGER)

Food Vendor(
vendor name: VARCHAR,
alcohol license number: INTEGER,
Style: VARCHAR)

Merchandise Vendor(
vendor name: VARCHAR,
brands carried: TEXT)

SQL Scripts

```
CREATE TABLE Guest (
                      guest_name VARCHAR2(20),
                      email VARCHAR2(20),
                      ticket_number INTEGER,
                      phone_number INTEGER,
                      PRIMARY KEY (guest_name, ticket_number)
);

CREATE TABLE Staff (
                      staff_id INTEGER,
                      staff_role VARCHAR2(255), -- Assuming VARCHAR2 for role
                      email VARCHAR2(255),
                      phone_number INTEGER,
                      name VARCHAR2(255), -- Assuming VARCHAR2 for name
                      PRIMARY KEY (staff_id, name)
);

CREATE TABLE Sponsor (
                        sponsor_name VARCHAR2(255),
                        amount INTEGER,
                        request VARCHAR2(255),
                        phone_number INTEGER,
                        email VARCHAR2(255),
                        PRIMARY KEY (sponsor_name, email)
);

CREATE TABLE Performer (
                          performer_name VARCHAR2(255) PRIMARY KEY, -- Assuming
VARCHAR2 for performer_name
                          agent VARCHAR2(255),
                          phone_number INTEGER,
                          email VARCHAR2(255)
);

CREATE TABLE Event (
                      event_time TIMESTAMP, -- Assuming TIMESTAMP for
event_time
                      event_id INTEGER PRIMARY KEY,
                      event_name VARCHAR2(255),
                      event_description VARCHAR2(255)
);

CREATE TABLE Department (
                           dept_name VARCHAR2(255),
                           dept_description VARCHAR2(255),
                           event_id INTEGER,
                           PRIMARY KEY (dept_name, event_id),
                           FOREIGN KEY (event_id) REFERENCES Event(event_id)
);

CREATE TABLE Venue (
                      venue_name VARCHAR2(255),
                      venue_address VARCHAR2(255),
                      venue_capacity INTEGER,
                      event_id INTEGER,
                      PRIMARY KEY (venue_name, venue_address, event_id),
                      FOREIGN KEY (event_id) REFERENCES EVENT
                      ON DELETE CASCADE
);
```

```
CREATE TABLE Vendor (
                       vendor_name VARCHAR2(255),
                       vendor_location VARCHAR2(255),
                       vendor_hours INTEGER,
                       PRIMARY KEY (vendor_name)
);

CREATE TABLE Food_Vendor (
                            vendor_name VARCHAR2(255),
                            alcohol_number INTEGER,
                            style VARCHAR2(255),
                            PRIMARY KEY (vendor_name),
                            FOREIGN KEY (vendor_name) REFERENCES
Vendor(vendor_name)
);

CREATE TABLE Merchandise_Vendor (
                                   vendor_name VARCHAR2(255),
                                   brands_carried VARCHAR2(255),
                                   PRIMARY KEY (vendor_name),
                                   FOREIGN KEY (vendor_name) REFERENCES
Vendor(vendor_name)
);

-- Your INSERT statements remain the same
INSERT INTO Guest (guest_name, email, ticket_number, phone_number)
VALUES ('Leo Wang', 'leo.wang@gmail.com', 1001, 123456789);
INSERT INTO Guest (guest_name, email, ticket_number, phone_number)
VALUES ('Michael Cui', 'michael.cui@gmail.com', 1002, 123456789);
INSERT INTO Guest (guest_name, email, ticket_number, phone_number)
VALUES('Kaiser Ninomiya', 'kaiser.ninomiya@gmail.com', 1003, 123456789);
INSERT INTO Guest (guest_name, email, ticket_number, phone_number)
VALUES('Jason Zhu', 'jason.zhu@gmail.com', 1004, 123456789);
INSERT INTO Guest (guest_name, email, ticket_number, phone_number)
VALUES('Stephen Qiao', 'stephen.qiao@gmail.com', 1005, 123456789);

INSERT INTO Staff (staff_id, name, email, phone_number, staff_role)
VALUES (1, 'Leo Wang', 'leo.wang@gmail.com', 123456789, 'Manager');
INSERT INTO Staff (staff_id, name, email, phone_number, staff_role)
VALUES(2, 'Michael Cui', 'michael.cui@gmail.com', 123456789, 'Supervisor');
INSERT INTO Staff (staff_id, name, email, phone_number, staff_role)
VALUES(3, 'Kaiser Ninomiya', 'kaiser.ninomiya@gmail.com', 123456789,
'Technician');
INSERT INTO Staff (staff_id, name, email, phone_number, staff_role)
VALUES(4, 'Jason Zhu', 'jason.zhu@gmail.com', 123456789, 'Coordinator');
INSERT INTO Staff (staff_id, name, email, phone_number, staff_role)
```

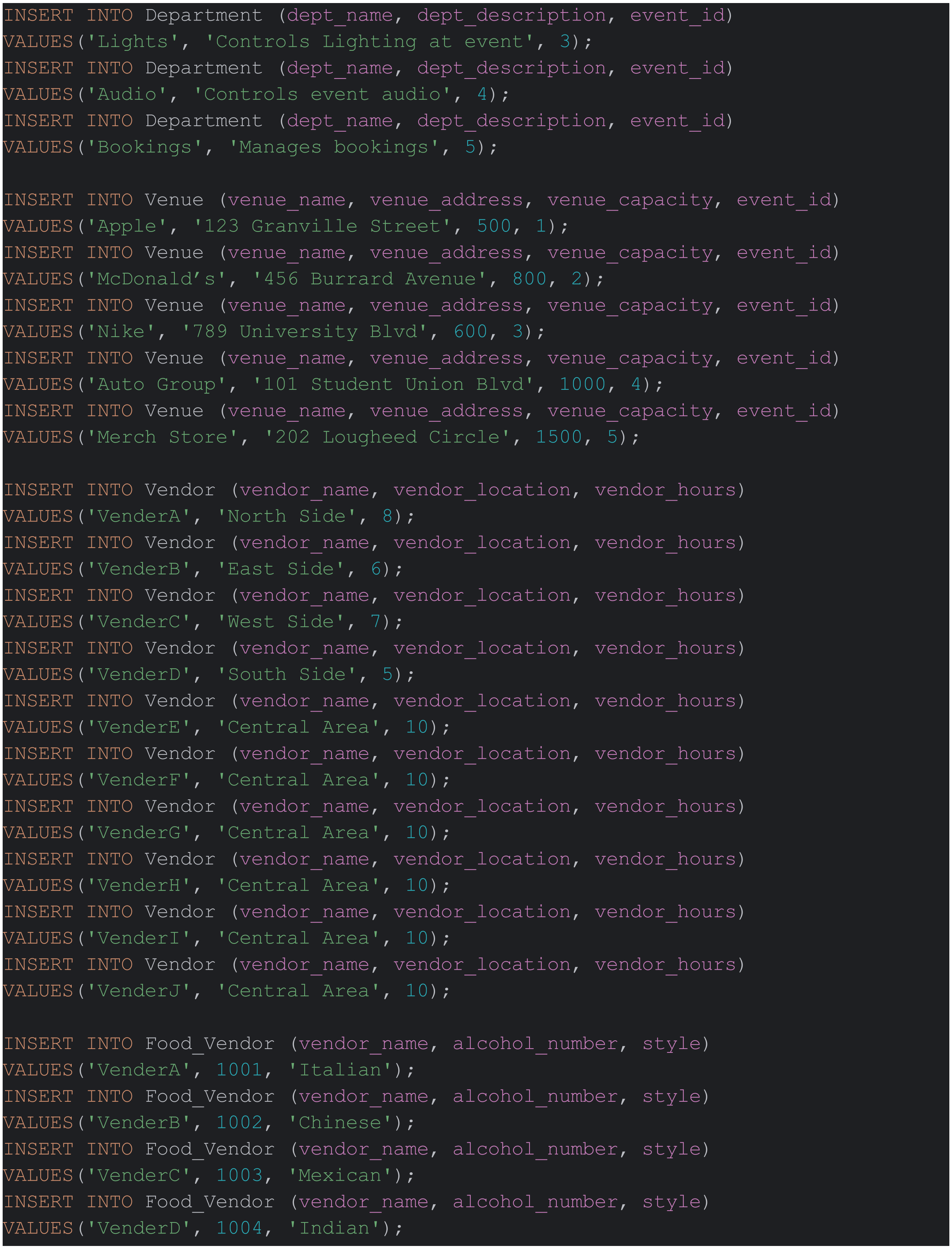
```
VALUES(5, 'Stephen Qiao', 'stephen.qiao@gmail.com', 123456789, 'Support
Staff');

INSERT INTO Sponsor (sponsor_name, amount, request, phone_number, email)
VALUES('Facebook', 10000, 'Display advertisement at Main Stage', 123456789,
'facebook@gmail.com');
INSERT INTO Sponsor (sponsor_name, amount, request, phone_number, email)
VALUES('Microsoft', 5000, 'Advertisement', 123456789, 'microsoft@gmail.com');
INSERT INTO Sponsor (sponsor_name, amount, request, phone_number, email)
VALUES('Nike', 7000, 'Pop-up shop', 123456789, 'nike@gmail.com');
INSERT INTO Sponsor (sponsor_name, amount, request, phone_number, email)
VALUES('Apple', 12000, 'Video sponsor', 123456789, 'apple@gmail.com');
INSERT INTO Sponsor (sponsor_name, amount, request, phone_number, email)
VALUES('Alibaba', 8000, 'Advertisement', 123456789, 'alibaba@gmail.com');

INSERT INTO Performer (performer_name, agent, phone_number, email)
VALUES('NBA Youngboy', 'Rich Paul', 123456789,
'youngboyneverbrokeagain@gmail.com');
INSERT INTO Performer (performer_name, agent, phone_number, email)
VALUES('Drake', 'Chubbs', 123456789, 'aubreygraham@gmail.com');
INSERT INTO Performer (performer_name, agent, phone_number, email)
VALUES('Travis Scott', 'Kylie Jenner', 123456789, 'tscott@gmail.com');
INSERT INTO Performer (performer_name, agent, phone_number, email)
VALUES('Kanye West', 'Pete Davidson', 123456789, 'ye@gmail.com');
INSERT INTO Performer (performer_name, agent, phone_number, email)
VALUES('Taylor Swift', 'Katy Perry', 123456789, 'taylorswift@gmail.com');

INSERT INTO Event (event_time, event_id, event_name, event_description)
VALUES('2023-11-01 08:00:00', 1, 'NBA Youngboy Concert', 'Concert for rapper
NBA Youngboy ');
INSERT INTO Event (event_time, event_id, event_name, event_description)
VALUES('2023-11-02 18:00:00', 2, 'NBA game', 'Golden State Warriors vs. Toronto
Raptors');
INSERT INTO Event (event_time, event_id, event_name, event_description)
VALUES('2023-11-03 20:00:00', 3, 'NHL game', 'Toronto Maple Leafs vs. Calgary
Flames');
INSERT INTO Event (event_time, event_id, event_name, event_description)
VALUES('2023-11-04 14:00:00', 4, 'Drake Concert', 'live performance by the 6ix
god');
INSERT INTO Event (event_time, event_id, event_name, event_description)
VALUES('2023-11-05 12:00:00', 5, 'WNBA game', 'New York Liberty vs. Las Vegas
Aces');

INSERT INTO Department (dept_name, dept_description, event_id)
VALUES('Tech', 'Controls event technology', 1);
INSERT INTO Department (dept_name, dept_description, event_id)
VALUES('Food', 'Manages food sellers at event', 2);
```

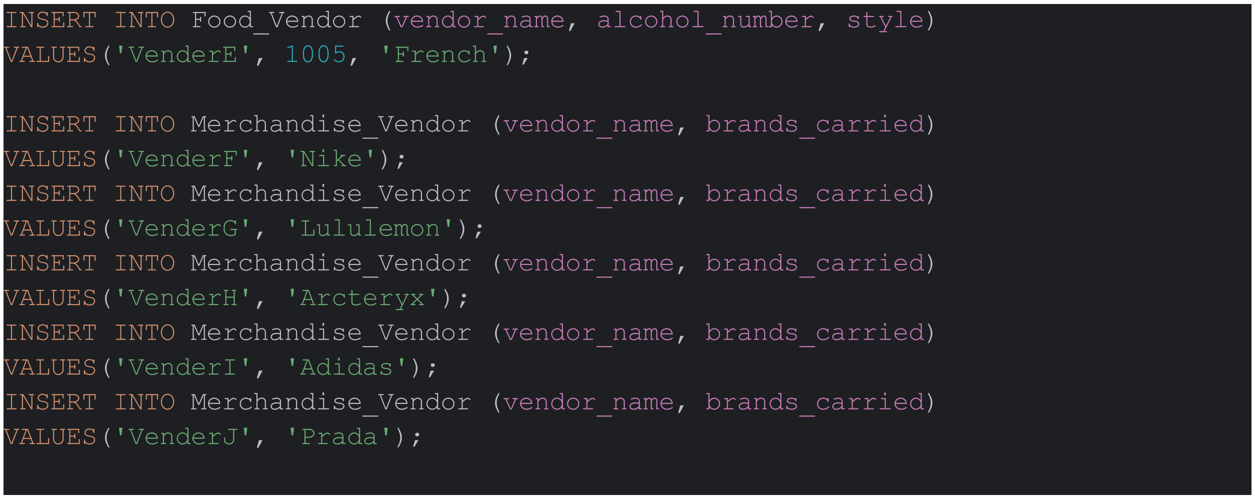


```
INSERT INTO Department (dept_name, dept_description, event_id)
VALUES('Lights', 'Controls Lighting at event', 3);
INSERT INTO Department (dept_name, dept_description, event_id)
VALUES('Audio', 'Controls event audio', 4);
INSERT INTO Department (dept_name, dept_description, event_id)
VALUES('Bookings', 'Manages bookings', 5);

INSERT INTO Venue (venue_name, venue_address, venue_capacity, event_id)
VALUES('Apple', '123 Granville Street', 500, 1);
INSERT INTO Venue (venue_name, venue_address, venue_capacity, event_id)
VALUES('McDonald’s', '456 Burrard Avenue', 800, 2);
INSERT INTO Venue (venue_name, venue_address, venue_capacity, event_id)
VALUES('Nike', '789 University Blvd', 600, 3);
INSERT INTO Venue (venue_name, venue_address, venue_capacity, event_id)
VALUES('Auto Group', '101 Student Union Blvd', 1000, 4);
INSERT INTO Venue (venue_name, venue_address, venue_capacity, event_id)
VALUES('Merch Store', '202 Lougheed Circle', 1500, 5);

INSERT INTO Vendor (vendor_name, vendor_location, vendor_hours)
VALUES('VenderA', 'North Side', 8);
INSERT INTO Vendor (vendor_name, vendor_location, vendor_hours)
VALUES('VenderB', 'East Side', 6);
INSERT INTO Vendor (vendor_name, vendor_location, vendor_hours)
VALUES('VenderC', 'West Side', 7);
INSERT INTO Vendor (vendor_name, vendor_location, vendor_hours)
VALUES('VenderD', 'South Side', 5);
INSERT INTO Vendor (vendor_name, vendor_location, vendor_hours)
VALUES('VenderE', 'Central Area', 10);
INSERT INTO Vendor (vendor_name, vendor_location, vendor_hours)
VALUES('VenderF', 'Central Area', 10);
INSERT INTO Vendor (vendor_name, vendor_location, vendor_hours)
VALUES('VenderG', 'Central Area', 10);
INSERT INTO Vendor (vendor_name, vendor_location, vendor_hours)
VALUES('VenderH', 'Central Area', 10);
INSERT INTO Vendor (vendor_name, vendor_location, vendor_hours)
VALUES('VenderI', 'Central Area', 10);
INSERT INTO Vendor (vendor_name, vendor_location, vendor_hours)
VALUES('VenderJ', 'Central Area', 10);

INSERT INTO Food_Vendor (vendor_name, alcohol_number, style)
VALUES('VenderA', 1001, 'Italian');
INSERT INTO Food_Vendor (vendor_name, alcohol_number, style)
VALUES('VenderB', 1002, 'Chinese');
INSERT INTO Food_Vendor (vendor_name, alcohol_number, style)
VALUES('VenderC', 1003, 'Mexican');
INSERT INTO Food_Vendor (vendor_name, alcohol_number, style)
VALUES('VenderD', 1004, 'Indian');
```



```
INSERT INTO Food_Vendor (vendor_name, alcohol_number, style)
VALUES('VenderE', 1005, 'French');

INSERT INTO Merchandise_Vendor (vendor_name, brands_carried)
VALUES('VenderF', 'Nike');
INSERT INTO Merchandise_Vendor (vendor_name, brands_carried)
VALUES('VenderG', 'Lululemon');
INSERT INTO Merchandise_Vendor (vendor_name, brands_carried)
VALUES('VenderH', 'Arcteryx');
INSERT INTO Merchandise_Vendor (vendor_name, brands_carried)
VALUES('VenderI', 'Adidas');
INSERT INTO Merchandise_Vendor (vendor_name, brands_carried)
VALUES('VenderJ', 'Prada');
```

SQL Queries

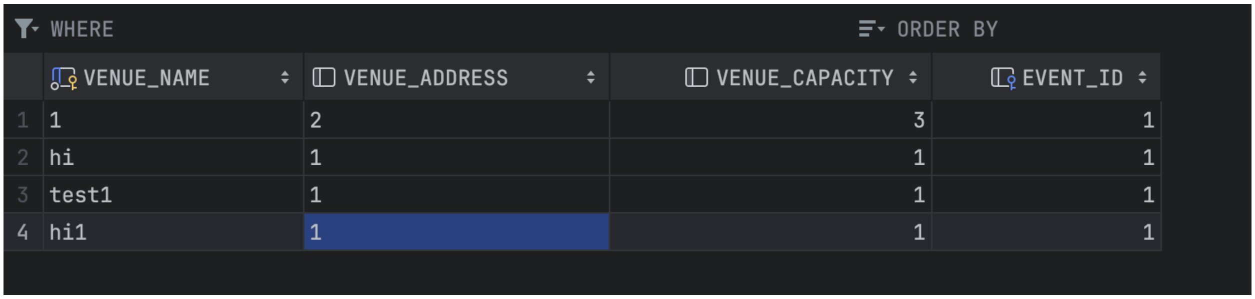
All of our SQL queries are in the DatabaseConnectionHandler.java file.

Insert: line 395
Delete: line 366
Update: line 336
Selection: line 271
Projection: line 207
Join:
Aggregation with GROUP BY: 144
Aggregation with HAVING: line 174
Nested Aggregation with GROUP BY:
Division: line 52

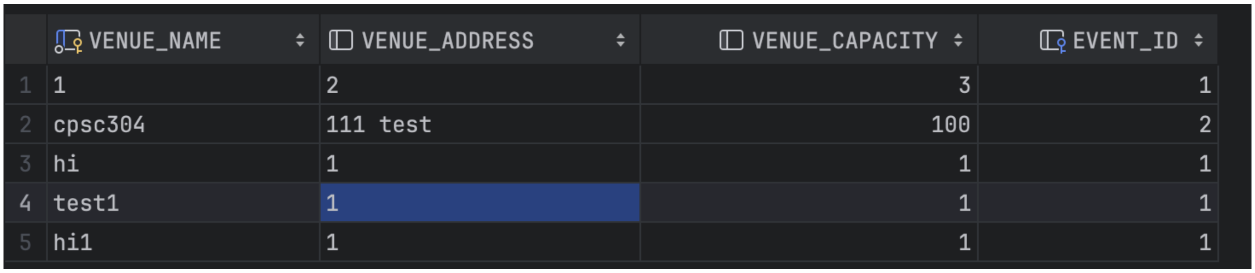
Screenshots

<u>Tables in the database</u>

Insert

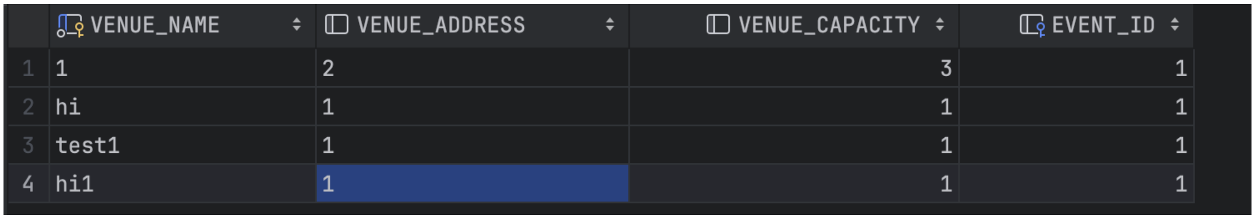


	VENUE_NAME	VENUE_ADDRESS	VENUE_CAPACITY	EVENT_ID
1	1	2	3	1
2	hi	1	1	1
3	test1	1	1	1
4	hi1	1	1	1



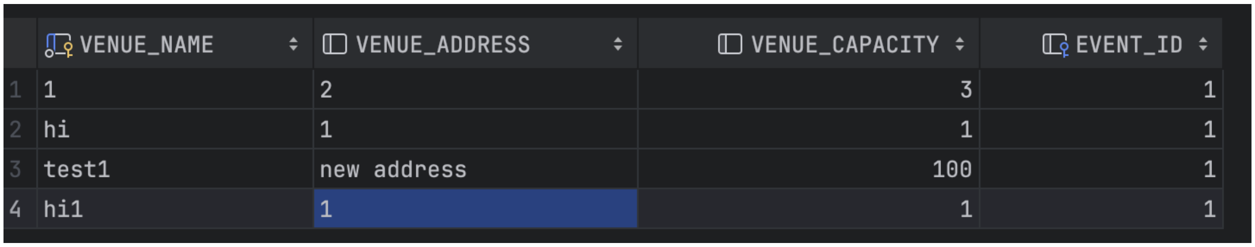
	VENUE_NAME	VENUE_ADDRESS	VENUE_CAPACITY	EVENT_ID
1	1	2	3	1
2	cpsc304	111 test	100	2
3	hi	1	1	1
4	test1	1	1	1
5	hi1	1	1	1

Delete



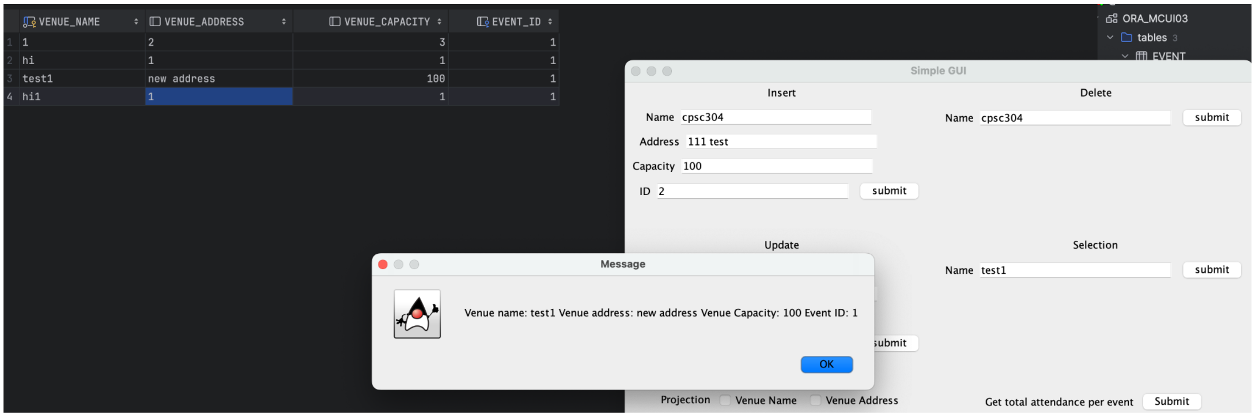
	VENUE_NAME	VENUE_ADDRESS	VENUE_CAPACITY	EVENT_ID
1	1	2	3	1
2	hi	1	1	1
3	test1	1	1	1
4	hi1	1	1	1

Update



	VENUE_NAME	VENUE_ADDRESS	VENUE_CAPACITY	EVENT_ID
1	1	2	3	1
2	hi	1	1	1
3	test1	new address	100	1
4	hi1	1	1	1

Selection



VENUE_NAME	VENUE_ADDRESS	VENUE_CAPACITY	EVENT_ID
1	2	3	1
hi	1	1	1
test1	new address	100	1
hi1	1	1	1

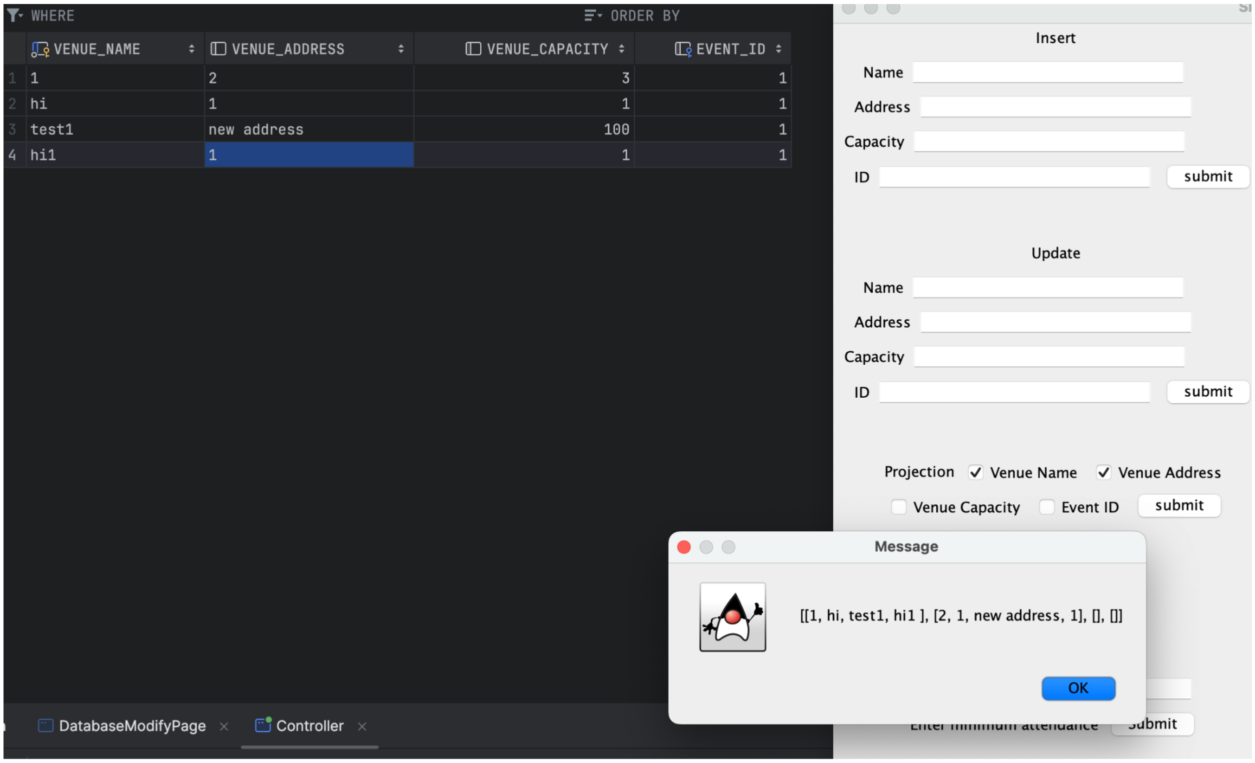
Insert
Name cpsc304
Address 111 test
Capacity 100
ID 2

Delete
Name cpsc304

Selection
Name test1

```
Venue name: test1 Venue address: new address Venue Capacity: 100 Event ID: 1
```

Projection

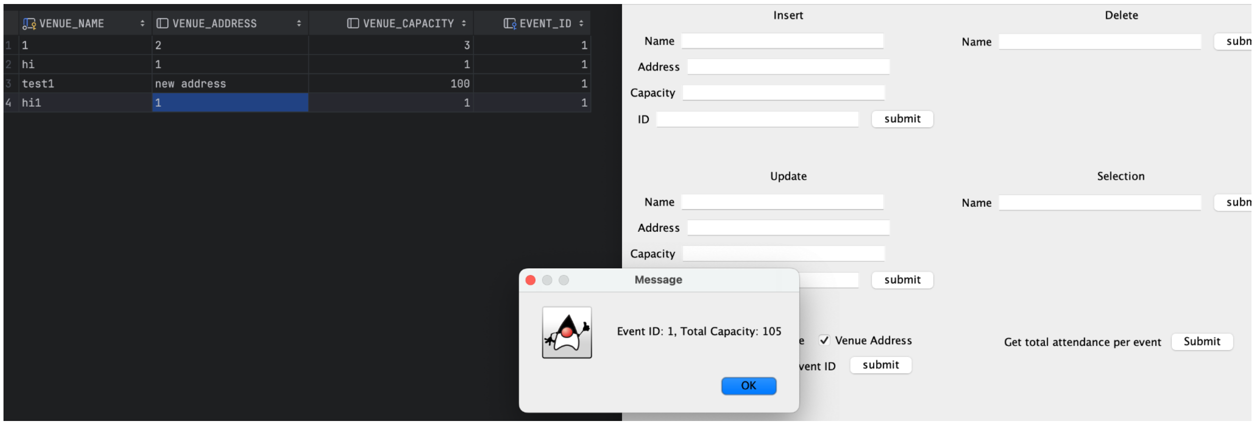


VENUE_NAME	VENUE_ADDRESS	VENUE_CAPACITY	EVENT_ID
1	2	3	1
hi	1	1	1
test1	new address	100	1
hi1	1	1	1

Projection ☑ Venue Name ☑ Venue Address
□ Venue Capacity □ Event ID

```
[[1, hi, test1, hi1 ], [2, 1, new address, 1], [], []]
```

Group-By

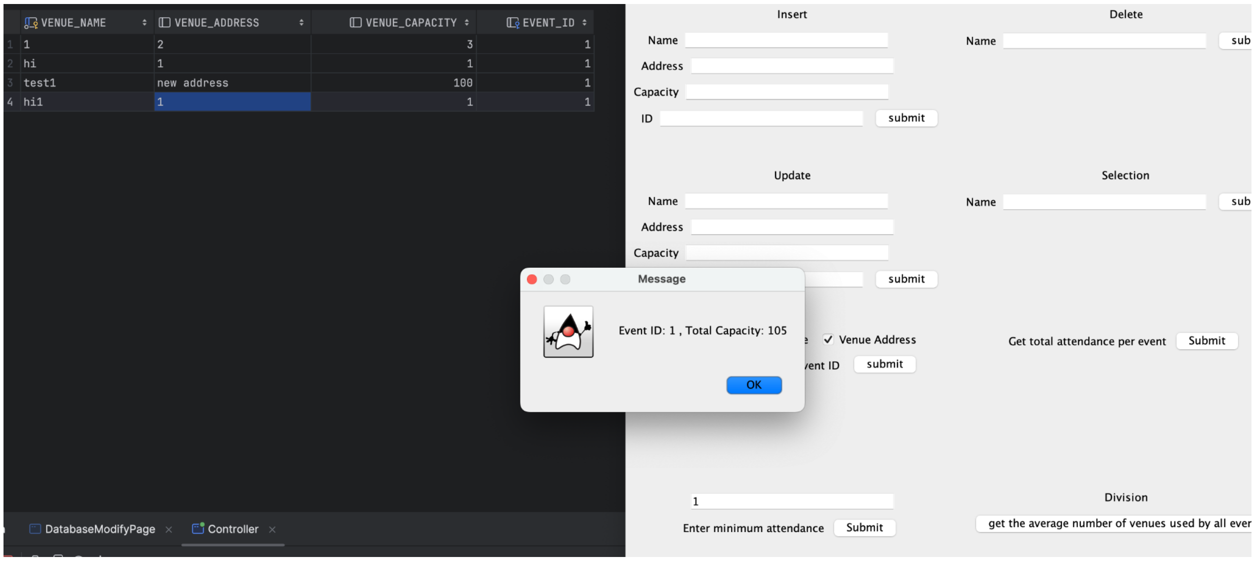


VENUE_NAME	VENUE_ADDRESS	VENUE_CAPACITY	EVENT_ID
1	2	3	1
hi	1	1	1
test1	new address	100	1
hi1	1	1	1

Message

Event ID: 1, Total Capacity: 105

Having



VENUE_NAME	VENUE_ADDRESS	VENUE_CAPACITY	EVENT_ID
1	2	3	1
hi	1	1	1
test1	new address	100	1
hi1	1	1	1

Message

Event ID: 1 , Total Capacity: 105

1

Sources

Tutorial 6