DBMS - MINI PROJECT

NAME: CHAITRA BHAT SRN: PES1UG20CS635

ROLL NO: 5 SECTION: K



https://github.com/Chaitra-Bhat383/College-Fest-Management-System

ABSTRACT

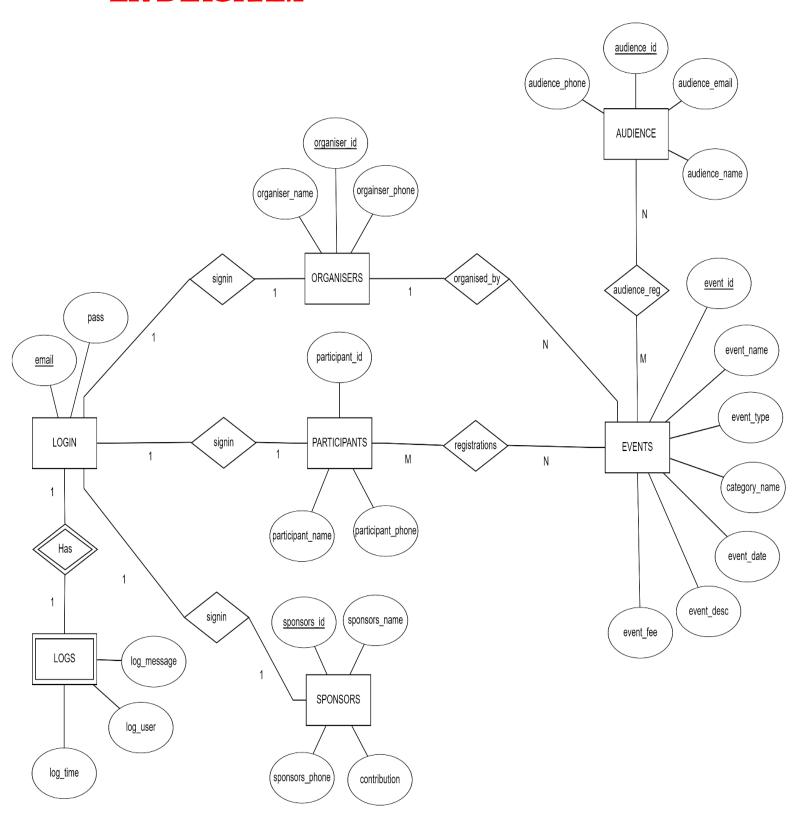
Fest Management is a Web Application that will be used to handle participant information, event information, organiser details, and create different conclusions. The system will include numerous modules such as a registration system and participation in various activities. The goal of this project is to automate the registration procedure during the fest and manage participation in various activities while preserving a full database and records.

TOOLS USED

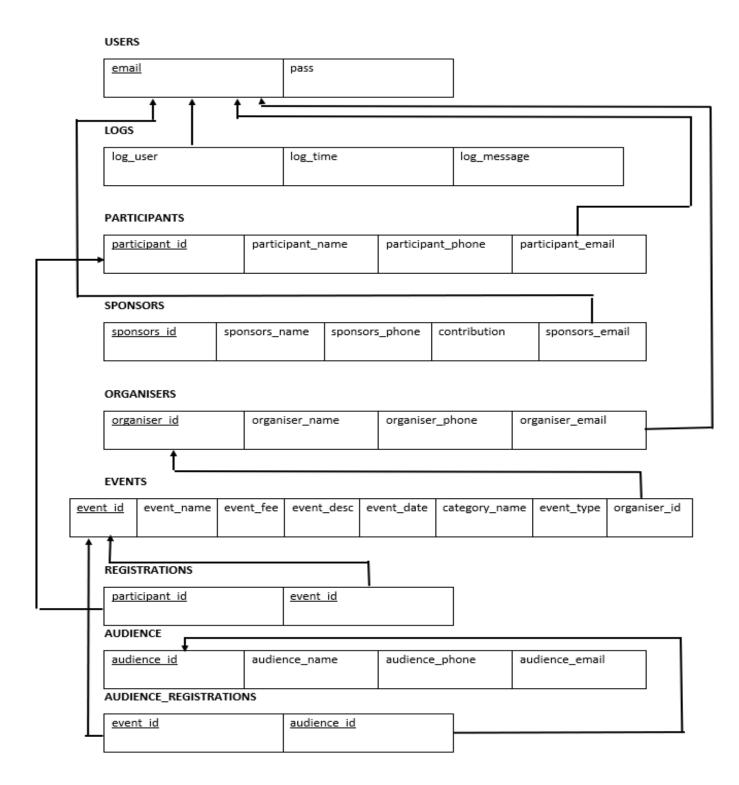
FRONT END: HTML, CSS, JAVASCRIPT

BACK END : PHP DATABASE : MYSQL

ER DIAGRAM



RELATIONAL SCHEMA



DDL - BUILDING THE DATABASE

LOGIN

```
CREATE TABLE `login`(
  `email` varchar(255) NOT NULL,
  `pass` varchar(255) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8_general_ci;
ALTER TABLE login
  ADD PRIMARY KEY ('email');
LOGS
CREATE TABLE `logs` (
  `log time` timestamp NULL DEFAULT CURRENT TIMESTAMP,
  `log user` varchar(255) NOT NULL,
  `log_message` text NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8 general ci;
ALTER TABLE `logs`
  ADD KEY `log user` (`log user`);
ALTER TABLE `logs`
  ADD CONSTRAINT `logs_ibfk_1` FOREIGN KEY (`log_user`) REFERENCES `login`
(`email`) ON DELETE RESTRICT;
ORGANISERS
CREATE TABLE `organisers`(
  `organiser id` int(11) NOT NULL,
  `organiser_name` varchar(255) NOT NULL,
  `organiser email` varchar(255) NOT NULL,
  `organiser phone` varchar(10) NOT NULL
  ) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8 general ci;
ALTER TABLE `organisers`
  ADD PRIMARY KEY (`organiser id`),
  ADD KEY `organiser email`(`organiser email`);
ALTER TABLE `organisers`
  MODIFY `organiser_id` int(11) NOT NULL AUTO_INCREMENT,
AUTO INCREMENT=67551;
```

```
ALTER TABLE `organisers`
  ADD CONSTRAINT `on organiser1` FOREIGN KEY (`organiser email`)
REFERENCES `login`(`email`);
EVENTS
CREATE TABLE `events` (
  `event id` int(11) NOT NULL,
  `event name` varchar(255) NOT NULL,
  `event type` varchar(255) NOT NULL,
  `category_name` varchar(255) NOT NULL,
  `event date` date NOT NULL,
  `event fee` int(11) NOT NULL,
  `event desc` text NOT NULL,
  `organiser id` int(11) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8_general_ci;
ALTER TABLE `events`
  ADD PRIMARY KEY ('event id'),
  ADD KEY `organiser id` (`organiser id`);
ALTER TABLE `events`
  MODIFY 'event id' int(11) NOT NULL AUTO INCREMENT,
AUTO INCREMENT=313817;
ALTER TABLE `events`
  ADD CONSTRAINT `events ibfk 2` FOREIGN KEY (`organiser id`) REFERENCES
`organisers` (`organiser id`) ON DELETE RESTRICT;
PARTICIPANTS
CREATE TABLE `participants` (
  `participant id` int(11) NOT NULL,
  `participant name` varchar(255) NOT NULL,
  `participant email` varchar(255) NOT NULL,
  `participant phone` varchar(10) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8 general ci;
ALTER TABLE `participants`
  ADD PRIMARY KEY ('participant id'),
  ADD KEY `participant email`(`participant email`);
ALTER TABLE `participants`
```

```
MODIFY 'participant id' int(11) NOT NULL AUTO INCREMENT,
AUTO INCREMENT=213651;
ALTER TABLE `participants`
  ADD CONSTRAINT `on participant1` FOREIGN KEY (`participant email`)
REFERENCES `login`(`email`);
AUDIENCE
CREATE TABLE `audience`(
  `audience id` int(11) NOT NULL,
  `audience_name` varchar(255) NOT NULL,
  `audience phone` varchar(10) NOT NULL,
  `audience email` varchar(255) NOT NULL
  );
ALTER TABLE `audience`
  ADD PRIMARY KEY (`audience id`);
ALTER TABLE `audience`
  MODIFY `audience id` int(11) NOT NULL AUTO INCREMENT, AUTO INCREMENT=99;
REGISTRATIONS
CREATE TABLE `registrations` (
  `participant id` int(11) NOT NULL,
  `event id` int(11) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8 general ci;
ALTER TABLE `registrations`
  ADD PRIMARY KEY ('participant id', 'event id'),
  ADD KEY `participant id` (`participant id`),
 ADD KEY `event id` (`event id`);
ALTER TABLE `registrations`
  ADD CONSTRAINT `registrations ibfk 1` FOREIGN KEY (`participant id`)
REFERENCES `participants` (`participant id`) ON DELETE CASCADE,
  ADD CONSTRAINT `registrations ibfk 2` FOREIGN KEY (`event id`)
REFERENCES `events` (`event id`) ON DELETE RESTRICT;
COMMIT;
AUDIENCE_REGISTRATIONS
```

CREATE TABLE `audience registrations` (

```
`audience_id` int(11) NOT NULL,
  `event_id` int(11) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8_general_ci;

ALTER TABLE `audience_registrations`
  ADD PRIMARY KEY (`audience_id`, `event_id`),
  ADD KEY `audience_id` (`audience_id`),
  ADD KEY `event_id` (`event_id`);

ALTER TABLE `audience_registrations`
  ADD CONSTRAINT `audience_registrations_ibfk_1` FOREIGN KEY
(`audience_id`) REFERENCES `audience` (`audience_id`) ON DELETE CASCADE,
  ADD CONSTRAINT `audience_registrations_ibfk_2` FOREIGN KEY (`event_id`)
REFERENCES `events` (`event_id`) ON DELETE RESTRICT;
COMMIT;
```

SPONSORS

```
CREATE TABLE `sponsors`(
   `sponsors_id` int(11) NOT NULL,
   `sponsors_name` varchar(255) NOT NULL,
   `sponsors_phone` varchar(10) NOT NULL,
   `sponsors_email` varchar(255) NOT NULL,
   `contribution` int(11) NOT NULL
)ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8_general_ci;

ALTER TABLE `sponsors`
   ADD PRIMARY KEY (`sponsors_id`),
   ADD KEY `sponsors_email`(`sponsors_email`);

ALTER TABLE `sponsors`
   MODIFY `sponsors_id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=4;

ALTER TABLE `sponsors`
   ADD CONSTRAINT `on_sponsors1` FOREIGN KEY (`sponsors_email`) REFERENCES `login`(`email`);
```

POPULATING THE DATABASE

```
INSERT INTO `login`(`email`, `pass`) VALUES
('chaitrabhat084@gmail.com',123);
INSERT INTO `login`(`email`, `pass`) VALUES
('chaitrabhat234@gmail.com',234);
```

```
INSERT INTO `login`(`email`, `pass`) VALUES ('david@gmail.com',123);
INSERT INTO `login`(`email`, `pass`) VALUES ('stokes@gmail.com',123);
INSERT INTO `login`(`email`, `pass`) VALUES ('ben4@gmail.com',123);
INSERT INTO `login`(`email`, `pass`) VALUES ('user1@gmail.com',123);
INSERT INTO `login`(`email`, `pass`) VALUES ('user2@gmail.com',123);
INSERT INTO `login`(`email`, `pass`) VALUES ('user3@gmail.com',123);
INSERT INTO `login`(`email`, `pass`) VALUES ('user4@gmail.com',123);
INSERT INTO `organisers` (`organiser id`, `organiser name`,
`organiser email`, `organiser phone`) VALUES
(67547, 'User1', 'user1@gmail.com', '8147497087');
INSERT INTO `organisers` (`organiser id`, `organiser name`,
`organiser email`, `organiser phone`) VALUES
(67548, 'User2', 'user2@gmail.com', '9845939755');
INSERT INTO `organisers` (`organiser id`, `organiser name`,
`organiser email`,`organiser phone`) VALUES
(67549, 'User3', 'user3@gmail.com', '9845939756');
INSERT INTO `organisers` (`organiser id`, `organiser name`,
`organiser email`, `organiser phone`) VALUES
(67550, 'User4', 'user4@gmail.com', '9845939757');
INSERT INTO `events` (`event id`, `event name`, `event type`,
`category name`, `event date`, `event fee`, `event desc`, `organiser id`)
VALUES
(313813, 'Coding & Debugging', 'Individual', 'Technical', '2022-12-18',
100, 'Can you beat the time? Most importantly, the errors?', 67549);
INSERT INTO `events` (`event_id`, `event_name`, `event_type`,
`category name`, `event date`, `event fee`, `event desc`, `organiser id`)
VALUES
(313814, 'Dance', 'Individual', 'Cultural', '2022-12-20', 200, 'Lace Your
Dancing Shoes!', 67548);
INSERT INTO `events` (`event id`, `event name`, `event type`,
`category name`, `event date`, `event fee`, `event desc`, `organiser id`)
VALUES
(313815, 'Cricket', 'Group', 'Cultural', '2022-12-20', 1000, 'Either hit a
wicket or give a free hit. The excitement is equal for both. The hearts
will beat for both.', 67550);
INSERT INTO `events` (`event id`, `event name`, `event type`,
`category name`, `event date`, `event fee`, `event desc`, `organiser id`)
VALUES
(313816, 'Singing', 'Individual', 'Cultural', '2022-12-20', 200, 'Good
Music! Good Vibes!', 67549);
```

```
INSERT INTO `participants` (`participant id`, `participant name`,
`participant email`, `participant phone`) VALUES
(213648, 'David', 'david@gmail.com', '9787747958');
INSERT INTO `participants` (`participant id`, `participant name`,
`participant email`, `participant phone`) VALUES
(213649, 'Chaitra Bhat', 'chaitrabhat084@gmail.com', '8147497087');
INSERT INTO `participants` (`participant_id`, `participant_name`,
`participant email`, `participant phone`) VALUES
(213650, 'Stokes', 'stokes@gmail.com', '7624845977');
INSERT INTO
`audience`(`audience id`,`audience name`,`audience phone`,`audience email`
) VALUES
(96, 'Ben', '9867778767', 'ben4@gmail.com');
INSERT INTO
`audience`(`audience id`,`audience name`,`audience phone`,`audience email`
) VALUES
(97, 'Chaitra', '9845939755', 'chaitrabhat234@gmail.com');
INSERT INTO
`audience`(`audience id`,`audience name`,`audience phone`,`audience email`
) VALUES
(98, 'Aura', '9845939759', 'aura@gmail.com');
INSERT INTO `registrations` (`participant id`, `event id`) VALUES
(213649, 313814);
INSERT INTO `registrations` (`participant_id`, `event id`) VALUES
(213648, 313813);
INSERT INTO `registrations` (`participant id`, `event id`) VALUES
(213648, 313814);
INSERT INTO `registrations` (`participant_id`, `event_id`) VALUES
(213650, 313815);
INSERT INTO `registrations` (`participant id`, `event id`) VALUES
(213650, 313816);
INSERT INTO `audience registrations` (`audience id`, `event id`) VALUES
(96,313813);
INSERT INTO `audience registrations` (`audience id`, `event id`) VALUES
(98,313813);
INSERT INTO `audience registrations` (`audience id`, `event id`) VALUES
(97,313814);
INSERT INTO `audience registrations` (`audience id`, `event id`) VALUES
(98,313815);
INSERT INTO `audience registrations` (`audience id`, `event id`) VALUES
(97,313815);
```

```
INSERT INTO `audience_registrations` (`audience_id`, `event_id`) VALUES
(97,313816);
INSERT INTO `audience_registrations` (`audience_id`, `event_id`) VALUES
(98,313816);

INSERT INTO `sponsors` (`sponsors_id`, `sponsors_name`,
`sponsors_phone`, `sponsors_email`, `contribution`) VALUES
(1,'Chaitra Bhat', '8147497087', 'chaitrabhat084@gmail.com',100);
INSERT INTO `sponsors` (`sponsors_id`, `sponsors_name`,
`sponsors_phone`, `sponsors_email`, `contribution`) VALUES
(2,'Chaitra', '9845939755', 'chaitrabhat234@gmail.com',1000);
INSERT INTO `sponsors` (`sponsors_id`, `sponsors_name`,
`sponsors_phone`, `sponsors_email`, `contribution`) VALUES
(3,'Ben', '8988878997', 'ben4@gmail.com',50);
```

JOIN QUERIES

- -- 1. JOIN QUERIES
- -- a) EQUI JOIN Display number of the audience for each event in the fest.

SELECT event_name, COUNT(audience_id) FROM audience_registrations as a JOIN events as e where a.event id = e.event id GROUP BY event name;

-- b) NATURAL JOIN - Display organiser name, event fee and event name for all the events.

select organiser name, event name, event fee FROM organisers NATURAL JOIN events;

```
MariaDB [festmanagement]> select organiser_name, event_name, event_fee FROM organisers NATURAL JOIN events;
                                  event_fee
organiser_name | event_name
User3
               | Coding & Debugging |
                                          100
User2
               Dance
                                          200
               Cricket
User4
                                         1000
             Singing
User3
                                          200
rows in set (0.001 sec)
```

-- c) JOIN - Display the name of the audience and the events they would attend.

select audience_name, event_name from audience_registrations as ar JOIN audience as a JOIN events as e where ar.audience_id = a.audience_id and ar.event_id = e.event_id;

```
MariaDB [festmanagement]> select audience name, event name from audience_registrations as ar JOIN audience as a JOIN eve
nts as e where ar.audience_id = a.audience_id and ar.event_id = e.event_id;
 audience_name | event_name
 Ben
               | Coding & Debugging
 Aura
               | Coding & Debugging
 Chaitra
               Dance
               Cricket
 Chaitra
 Aura
               | Cricket
 Chaitra
               Singing
               Singing
 Aura
 rows in set (0.001 sec)
```

CO-RELATED QUERIES

- -- 8. CO-RELATED QUERIES
- -- a) NOT EXISTS Display the participants who have not sponsored any event.

select * from participants where not exists(select * from sponsors where participants.participant_email = sponsors.sponsors_email);

-- b) EXISTS - Display the participants who has sponsored any one event.

select * from participants where exists(select * from sponsors where participants.participant_email = sponsors.sponsors_email);

-- c) NOT EXISTS - Display the sponsors who have not participated in any event.

select * from sponsors where not exists(select * from participants where participants.participant_email = sponsors.sponsors_email);

-- d) EXISTS - Display the sponsors who have participated in any one event.

select * from sponsors where exists(select * from participants where participants.participant_email = sponsors.sponsors_email);

NESTED QUERIES

- -- 4. NESTED QUERIES
- -- a) IN Display ids and names of all the events which are organised by either user3 or user2.

SELECT event_id,event_name from events where organiser_id IN (SELECT organiser_id

from organisers where organiser_name = 'User3' or organiser_name = 'User2');

-- b) NOT IN - Display ids and names of all the events which are not organised by either user3 or user2.

SELECT event_id,event_name from events where organiser_id NOT IN (SELECT organiser_id from organisers where organiser_name = 'User3' or organiser_name = 'User2');

AGGREGATE FUNCTIONS

- -- 2.AGGREGATE FUNCTION
- -- a) SUM Display the total contributions from all the sponsors.

SELECT SUM(contribution) as contribution FROM sponsors;

```
MariaDB [festmanagement]> SELECT SUM(contribution) as contribution FROM sponsors;

+------
| contribution |

+------
| 1150 |

+-----
1 row in set (0.001 sec)
```

-- b) COUNT - Display the number of audiences who registered for various events along with event id.

SELECT event_id, COUNT(audience_id) FROM audience_registrations GROUP BY event_id;

```
MariaDB [festmanagement]> SELECT event_id, COUNT(audience_id) FROM audience_registrations GROUP BY event_id;
+------+
| event_id | COUNT(audience_id) |
+------+
| 313813 | 2 |
| 313814 | 1 |
| 313815 | 2 |
| 313816 | 2 |
| 4 rows in set (0.001 sec)
```

-- c) COUNT - Display the number of participants who registered for various events along with event id.

SELECT event_id,COUNT(*) AS count FROM registrations GROUP BY event_id ORDER BY COUNT(participant_id);

-- d) MAX - Display name, email and the contribution of the sponsor who contributed the highest.

SELECT sponsors_name, sponsors_email, MAX(contribution) from sponsors group by sponsors_email DESC LIMIT 1;

SET OPERATIONS

-- 3.SET OPERATION

-- c) UNION - Display name, phone number and email id all the users who are participant or audience.

SELECT participant_name as name,participant_phone as phone,participant_email as email from participants UNION SELECT audience_name, audience_phone,audience_email from audience;

-- b) INTERSECT - Display the name and phone number of the user who is participant as well as the sponsor.

SELECT participant_name as name,participant_phone as phone from participants INTERSECT SELECT sponsors_name, sponsors_phone from sponsors;

-- c) EXCEPT - Display the name and phone number of the user who are audiences but not sponsors.

SELECT audience_name as name, audience_phone as phone,audience_email as email from audience EXCEPT SELECT sponsors_name, sponsors_phone,sponsors_email from sponsors;

VIEW

- -- 7. VIEWS
- -- Create a view representing event ids and respective number of audience in each.

create view stat2 as select e.event_id, event_name, count(audience_id) as audience from events as e,audience_registrations as ar where ar.event_id = e.event_id group by e.event_id;

MariaDB [festmanagement]> create view stat2 as select e.event_id, event_name, count(audience_id) as audience from events as e,audience_registrations as ar where ar.event_id = e.event_id group by e.event_id; Query OK, 0 rows affected (0.009 sec)

select * from stat2;

-- Create a view representing event ids and respective number of participants in each.

create view stat1 as select e.event_id, event_name, count(participant_id) as participant from events as e, registrations as r where r.event_id = e.event_id group by e.event_id;

MariaDB [festmanagement]> create view stat1 as select e.event_id, event_name, count(participant_id) as participant from events as e, registrations as r where r.event_id = e.event_id group by e.event_id; Query OK, 0 rows affected (0.007 sec)

select * from stat1;

```
MariaDB [festmanagement]> select * from stat1;
+-----+
| event_id | event_name | participant |
+-----+
| 313813 | Coding & Debugging | 1 |
| 313814 | Dance | 2 |
| 313815 | Cricket | 1 |
| 313816 | Singing | 1 |
+-----+
4 rows in set (0.002 sec)
```

-- Create a view representing event ids and respective number of audience and number of participants in each i.e summary of both the above views

create view stats as select stat1.event_id,stat1.event_name,participant,audience from stat1 INNER JOIN stat2 where stat1.event_id = stat2.event_id;

```
MariaDB [festmanagement]> create view stats as select stat1.event_id,stat1.event_name,participant,audience from stat1 IN
NER JOIN stat2 where stat1.event_id = stat2.event_id;
Query OK, 0 rows affected (0.009 sec)
```

select * from stats;

```
MariaDB [festmanagement]> select * from stats;

| event_id | event_name | participant | audience |
| 313813 | Coding & Debugging | 1 | 2 |
| 313814 | Dance | 2 | 1 |
| 313815 | Cricket | 1 | 2 |
| 313816 | Singing | 1 | 2 |
| 4 rows in set (0.003 sec)
```

FUNCTION

-- 5. FUNCTIONS

-- Function to display the remaining seats if available or display that seats are full for each event.

```
DELIMITER $$
CREATE FUNCTION Seats_Available(e_id varchar(50))
RETURNS varchar(100)
DETERMINISTIC
BEGIN
DECLARE N INT;
DECLARE E VARCHAR(50);
DECLARE MSG varchar(1000);
select count(*) from audience_registrations where audience_registrations.event_id = e_id
select event name from events where events.event id = e id into E;
if N>=2 then
set MSG:=concat("SEATS ARE FULL FOR ", E," EVENT!!!");
set MSG:=concat("YOU HAVE ",2-N," SEATS LEFT FOR ",E," EVENT!!!");
end if:
RETURN MSG;
END $$
DELIMITER;
```

```
MariaDB [festmanagement]> DELIMITER $$
MariaDB [festmanagement]> CREATE FUNCTION Seats_Available(e_id varchar(50))
   -> RETURNS varchar(100)
   -> DETERMINISTIC
   -> BEGIN
   -> DECLARE N INT;
   -> DECLARE E VARCHAR(50);
   -> DECLARE MSG varchar(1000);
   -> select count(*) from audience_registrations where audience_registrations.event_id = e_id into N;
   -> select event_name from events where events.event_id = e_id into E;
   -> if N>=2 then
    -> set MSG:=concat("SEATS ARE FULL FOR ", E," EVENT!!!");
    -> set MSG:=concat("YOU HAVE ",2-N," SEATS LEFT FOR ",E," EVENT!!!");
    -> end if;
    -> RETURN MSG;
    -> END $$
Query OK, 0 rows affected, 2 warnings (0.010 sec)
MariaDB [festmanagement]> DELIMITER ;
MariaDB [festmanagement]> _
```

select seats_available(event_id) from events;

PROCEDURE

-- Create a Procedure which displays the sponsors who has contributed atleast 100

```
DELIMITER &&
CREATE PROCEDURE sponsors_who_contributed_atleast_100()
BEGIN
SELECT * FROM sponsors WHERE contribution >= 100;
END &&
DELIMITER;
```

```
MariaDB [festmanagement]> DELIMITER &&
MariaDB [festmanagement]> CREATE PROCEDURE sponsors_who_contributed_atleast_100()
    -> BEGIN
    -> SELECT * FROM sponsors WHERE contribution >= 100;
    -> END &&
Query OK, 0 rows affected (0.008 sec)

MariaDB [festmanagement]> DELIMITER;
MariaDB [festmanagement]>
```

CALL sponsors who contributed atleast 100();

TRIGGER

-- Trigger to check how many more participants can register for an event.

```
DELIMITER $$
CREATE TRIGGER Seats_Left
BEFORE INSERT
ON registrations
FOR EACH ROW
BEGIN
declare ERROR_MSG varchar(100);
declare val varchar(100);
set ERROR MSG = ("Maximum Limit for Number of Participants Reached! Sorry Next
Time");
if(select count(*) from registrations where registrations.event_id = new.event_id) >= 2
then signal sqlstate '45000'
set message_text = ERROR_MSG;
end if;
END $$
DELIMITER;
```

```
MariaDB [festmanagement]> DELIMITER $$
MariaDB [festmanagement]> CREATE TRIGGER Seats_Left
    -> BEFORE INSERT
    -> ON registrations
   -> FOR EACH ROW
   -> BEGIN
   -> declare ERROR_MSG varchar(100);
    -> declare val varchar(100);
    -> set ERROR_MSG =("Maximum Limit for Number of Participants Reached! Sorry Next Time");
    -> if(select count(*) from registrations where registrations.event_id = new.event_id) >= 2
    -> then signal sqlstate '45000'
    -> set message_text = ERROR_MSG;
    -> end if;
    -> END $$
Query OK, 0 rows affected (0.010 sec)
MariaDB [festmanagement]> DELIMITER ;
MariaDB [festmanagement]>
```

Insert into registrations values(213648,313816);

```
MariaDB [festmanagement]> Insert into registrations values(213648,313816);
Query OK, 1 row affected (0.007 sec)
```

Insert into registrations values(213650,313814);

```
MariaDB [festmanagement]> Insert into registrations values(213650,313816);
ERROR 1644 (45000): Maximum Limit for Number of Participants Reached! Sorry Next Time
```