

Edward Keegan

Web Apps Lab04

9/16/22

1. Edward Keegan

2. http://cis-linux2.temple.edu:8080/FA22_3308_tul66739/

3. user_role TABLE DESIGN

Query 1 user_role - Table user_role - Table

Table Name: user_role Schema: FA22_3308_tul66739

Collation: Schema Default Engine: InnoDB

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
user_role_id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
user_role_type	VARCHAR(10)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

4. web_user TABLE DESIGN and FOREIGN KEY

Table Name: web_user Schema: FA22_3308_tul66739

Collation: latin1 - default collation Engine: InnoDB

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
web_user_id	INT(11)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
user_email	VARCHAR(45)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
user_password	VARCHAR(45)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
image	VARCHAR(500)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
membership_fee	DECIMAL(10,2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
birthday	DATE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
user_role_id	INT(11)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Query 1 x user_role - Table user_role - Table web_user - Table


Limit to 1000 rows

```
1 • alter table web_user add foreign key (user_role_id) references user_role (user_role_id);
```

5. DATA ENTRY ERRORS

a) Error: Duplicate user_role PK

The following tasks will now be executed. Please monitor the execution.
Press Show Logs to see the execution logs.

 Execute SQL Statements

Error: There was an error while applying the SQL script to the database.

Message Log

```
Executing:
INSERT INTO `FA22_3308_tul66739`.`user_role` (`user_role_id`, `user_role_type`) VALUES (1,
'Admin');
INSERT INTO `FA22_3308_tul66739`.`user_role` (`user_role_id`, `user_role_type`) VALUES (2,
'Member');
INSERT INTO `FA22_3308_tul66739`.`user_role` (`user_role_id`, `user_role_type`) VALUES (2,
'View');

Operation failed: There was an error while applying the SQL script to the database.
ERROR 1062: 1062: Duplicate entry '2' for key 'PRIMARY'
SQL Statement:
INSERT INTO `FA22_3308_tul66739`.`user_role` (`user_role_id`, `user_role_type`) VALUES (2,
'View')
```


b) Error: Invalid user_role FK in web_user record

Review SQL Script

Apply SQL Script

Applying SQL script to the database

The following tasks will now be executed. Please monitor the execution.
Press Show Logs to see the execution logs.

 Execute SQL Statements

Error: There was an error while applying the SQL script to the database.

Message Log

Operation failed: There was an error while applying the SQL script to the database.
Executing:
INSERT INTO `FA22_3308_tul66739`.`web_user` (`user_email`, `user_password`,
`membership_fee`, `user_role_id`) VALUES ('josh', 'josh', '25', '4');

ERROR 1452: 1452: Cannot add or update a child row: a foreign key constraint fails
(`FA22_3308_tul66739`.`web_user`, CONSTRAINT `web_user_ibfk_1` FOREIGN KEY (`user_role_id`)
REFERENCES `user_role` (`user_role_id`))
SQL Statement:
INSERT INTO `FA22_3308_tul66739`.`web_user` (`user_email`, `user_password`,
`membership_fee`, `user_role_id`) VALUES ('josh', 'josh', '25', '4')


c) Error: Cannot delete a user_role record that's referenced by a web_user record

Review SQL Script

Apply SQL Script

Applying SQL script to the database

The following tasks will now be executed. Please monitor the execution.
Press Show Logs to see the execution logs.

 Execute SQL Statements

Error: There was an error while applying the SQL script to the database.

Message Log

```
Operation failed: There was an error while applying the SQL script to the database.  
Executing:  
DELETE FROM `FA22_3308_tul66739`.`user_role` WHERE `user_role_id` = '0';  
  
ERROR 1451: 1451: Cannot delete or update a parent row: a foreign key constraint fails  
(`FA22_3308_tul66739`.`web_user`, CONSTRAINT `web_user_ibfk_1` FOREIGN KEY (`user_role_id`)  
REFERENCES `user_role` (`user_role_id`))  
SQL Statement:  
DELETE FROM `FA22_3308_tul66739`.`user_role` WHERE `user_role_id` = '0'
```

6. SELECT STATEMENTS

a) USER_ROLE: all rows, all columns, sorted by user_role_id.

The screenshot displays a database management interface with two main sections. The top section shows a query editor with a single query: `SELECT * FROM FA22_3308_tul66739.user_role;`. The bottom section shows the results of this query in a 'Result Grid'.

Query Editor:

```
Query 1 user_role web_user user_role x
Limit to 1000 rows
1 • SELECT * FROM FA22_3308_tul66739.user_role;
```

Result Grid:

user_role_id	user_role_type
0	ADMIN
1	MEMBER
3	TEMP
2	VIEW
HULL	HULL

Output:

user_role 2 x

Output

Action Output

#	Time	Action	Message
✓ 1	17:03:22	SELECT * FROM FA22_3308_tul66739.user_role LIMIT 0, 1000	3 row(s) returned
✓ 2	17:03:27	SELECT * FROM FA22_3308_tul66739.web_user LIMIT 0, 1000	4 row(s) returned
✓ 3	17:08:03	SELECT * FROM FA22_3308_tul66739.user_role LIMIT 0, 1000	3 row(s) returned
✗ 4	17:08:33	DELETE FROM 'FA22_3308_tul66739'.user_role WHERE 'user_role_id'='0'	1451: Cannot delete or update a parent row: a foreign key constraint fails
✓ 5	17:10:39	SELECT * FROM FA22_3308_tul66739.user_role LIMIT 0, 1000	4 row(s) returned

b) WEB_USER: all rows, all columns, sorted by web_user_id.

The screenshot shows a database query tool interface. The query editor at the top contains the following SQL statement:

```
1 • SELECT * FROM FA22_3308_tul66739.web_user;
```

The results are displayed in a table with the following columns: web_user_id, user_email, user_password, image, membership_fee, birthday, and user_role_id. The data is sorted by web_user_id.

web_user_id	user_email	user_password	image	membership_fee	birthday	user_role_id
26	ioe	ioe	http://...	123.33	1990-11-11	0
27	sam	sam	NULL	NULL	2012-11-11	1
28	andrew		NULL	45.22	NULL	1
29	sara		NULL	34.24	1999-06-12	2
31	sallv		NULL	NULL	NULL	2
NULL	NULL	NULL	NULL	NULL	NULL	NULL

The bottom section shows the 'Action Output' table, which tracks the execution of the query:

#	Time	Action	Message
1	17:03:22	SELECT * FROM FA22_3308_tul66739.user_role LIMIT 0, 1000	3 row(s) returned
2	17:03:27	SELECT * FROM FA22_3308_tul66739.web_user LIMIT 0, 1000	4 row(s) returned

c) WEB_USER JOINED WITH USER_ROLE: all rows, certain columns, sorted.

The screenshot shows a database query tool interface. The query editor at the top contains the following SQL statement:

```
1 • SELECT web_user_id, user_role.user_role_id from web_user, user_role
2 ORDER BY web_user_id, user_role.user_role_id;
3
```

The results are displayed in a table with the following columns: web_user_id, user_role_id. The data is sorted by web_user_id and user_role_id.

web_user_id	user_role_id
26	0
26	1
26	2
26	3
27	0
27	1
27	2
27	3
28	0
28	1
28	2
28	3
29	0
29	1
29	2
29	3
31	0
31	1
31	2
31	3

The bottom section shows the 'Action Output' table, which tracks the execution of the query:

#	Time	Action	Message
1	16:19:02	SELECT web_user_id, user_email, user_password, image, membership_fee, birthday, web_user.user_role_id, user_role_type FROM web_user, ...	5 row(s) returned
2	00:29:29	SELECT web_user_id, user_role.user_role_id from web_user, user_role ORDER BY web_user_id, user_role.user_role_id LIMIT 0, 1000	20 row(s) returned

