

1. STUDENT NAME

2. URL to STUDENT WEB SITE

3. user_role TABLE DESIGN

4. web_user TABLE DESIGN and FOREIGN KEY

5. “OTHER” TABLE DESIGN and FOREIGN KEY

6. DATA ENTRY ERRORS

- a) Error: Duplicate user_role PK
- b) Error: Invalid user_role FK in web_user record
- c) Error: Cannot delete a user_role record that’s referenced by a web _user record
- d) Invalid web_user FK in “other” record
- e) Error trying to delete a web_user record that’s referenced by an “other” record

7. SELECT STATEMENTS

- a) USER_ROLE: all rows, all columns, sorted by user_role_id.
- b) WEB_USER: all rows, all columns, sorted by web_user_id.
- c) WEB_USER JOINED WITH USER_ROLE: all rows, certain columns, sorted.
- f) “OTHER”: all rows, all columns, sorted by the id of your “other” table.
- g) “OTHER” JOINED WITH WEB_USER all rows, certain columns, sorted.
- h) “OTHER” JOINED WITH WEB_USER some rows, certain columns, sorted.

1. Name: Himanshi Sheth
2. Web Link: fa24_3308_tur08798/index.html
3. user_role TABLE DESIGN:

Table Name: Schema:

Charset/Collation: Engine:

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI
user_role_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 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"/>

4. web_user TABLE DESIGN and FOREIGN KEY:

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 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
user_image	VARCHAR(600)	<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"/>	
membership_fee	DECIMAL(8,2)	<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 user_role - Table user_role web_user - Table web_user

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

5. "OTHER" TABLE DESIGN and FOREIGN KEY

Table Name: Schema:

Charset/Collation: Engine:

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
destination_id	INT(11)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
destination_name	VARCHAR(100)	<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"/>	
country	VARCHAR(50)	<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"/>	
description	TEXT	<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
image_url	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
visit_date	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
trip_duration	INT(11)	<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
rating	DECIMAL(3,2)	<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
web_user_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"/>	

```
ALTER TABLE `other` ADD FOREIGN KEY (`web_user_id`) REFERENCES `web_user` (`web_user_id`);
```

6. DATA ENTRY ERRORS:

a) Error: Duplicate user_role PK

The screenshot shows the SQL Developer interface with a message log window open. The log displays the following SQL statements and error:

```
Executing:
UPDATE `fa24_3308_tur08798`.`user_role` SET `user_role_type` = 'USER'
WHERE (`user_role_id` = '2');
UPDATE `fa24_3308_tur08798`.`user_role` SET `user_role_type` = 'EDITOR'
WHERE (`user_role_id` = '3');
INSERT INTO `fa24_3308_tur08798`.`user_role` (`user_role_id`,
`user_role_type`) VALUES ('3','EDITOR');
```

Operation failed: There was an error while applying the SQL script to the database.
ERROR 1062: 1062: Duplicate entry '3' for key 'PRIMARY'

The background window shows a table named `user_role` with the following data:

user_role_id	user_role_type
1	ADMIN
2	USER
3	EDITOR
3	EDITOR

b) Error: Invalid user_role FK in web_user record

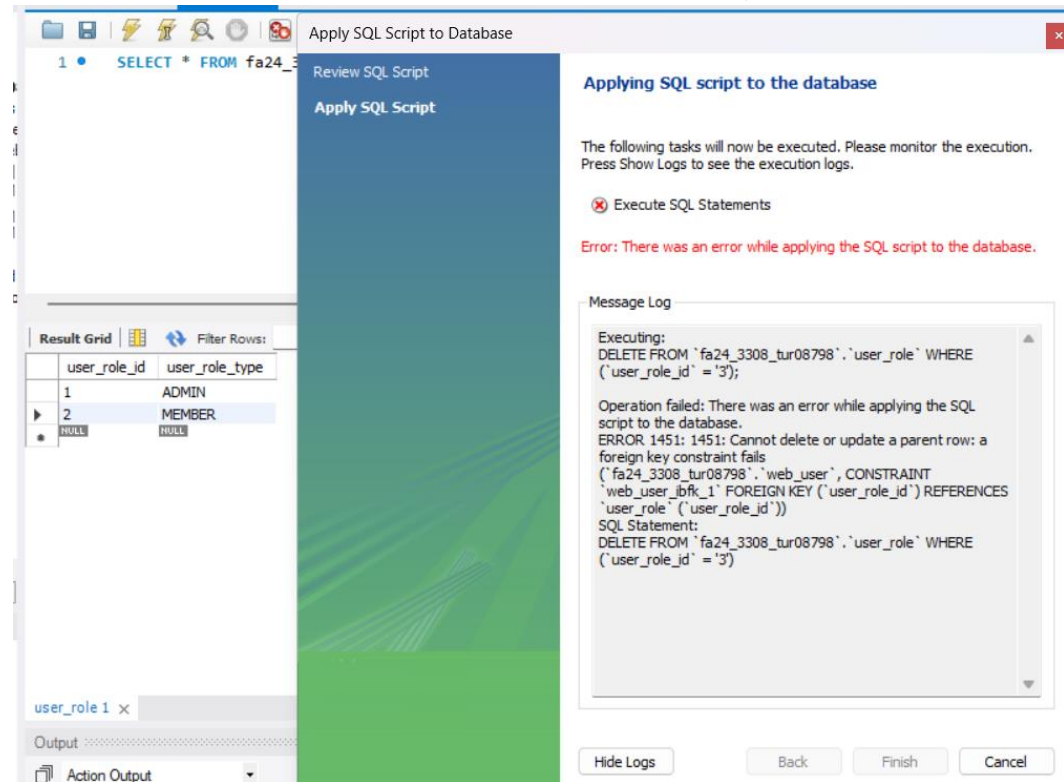
The screenshot shows the message log window with the following SQL statement and error:

```
Executing:
UPDATE `fa24_3308_tur08798`.`web_user` SET `user_role_id` = '8' WHERE (`web_user_id` = '6');
```

Operation failed: There was an error while applying the SQL script to the database.
ERROR 1452: 1452: Cannot add or update a child row: a foreign key constraint fails
(`fa24_3308_tur08798`.`web_user`, CONSTRAINT `web_user_ibfk_1` FOREIGN KEY (`user_role_id`) REFERENCES `user_role` (`user_role_id`))

The SQL Statement is:
`UPDATE `fa24_3308_tur08798`.`web_user` SET `user_role_id` = '8' WHERE (`web_user_id` = '6')`

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



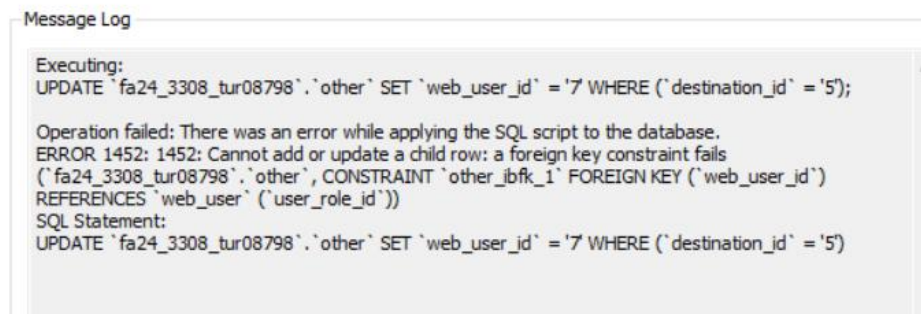
d) Invalid web_user FK in "other" record

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.



e) Error trying to delete a web_user record that's referenced by an "other" record

Message Log

```
Executing:
DELETE FROM `fa24_3308_tur08798`.`web_user` WHERE (`web_user_id` = '6');

Operation failed: There was an error while applying the SQL script to the database.
ERROR 1451: 1451: Cannot delete or update a parent row: a foreign key constraint fails
(`fa24_3308_tur08798`.`other`, CONSTRAINT `other_ibfk_1` FOREIGN KEY (`web_user_id`)
REFERENCES `web_user` (`user_role_id`))
SQL Statement:
DELETE FROM `fa24_3308_tur08798`.`web_user` WHERE (`web_user_id` = '6')
```

7. SELECT STATEMENTS

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

```
1 • SELECT * FROM user_role
2 ORDER BY user_role_id;
```

Result Grid			Filter Rows:	Edi
	user_role_id	user_role_type		
▶	1	ADMIN		
	2	MEMBER		
	3	EDITOR		

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

1 • **SELECT** * **FROM** web_user
2 **ORDER BY** web_user_id;

	web_user_id	user_email	user_password	user_image	membership_fee	birthday	user_role_id
1	1	tur08@temple.edu	1234	https://as1.ftcdn.net/v2/jpg/02/43/12/34/1000...	NULL	2000-09-03	2
2	2	jack@gamil.com	5864	https://as1.ftcdn.net/v2/jpg/02/43/12/34/1000...	NULL	1995-03-25	1
3	3	nancy@hotmail.com	6586	https://as1.ftcdn.net/v2/jpg/02/43/12/34/1000...	50.00	NULL	2
4	4	nick@yahoo.com	56079	https://as1.ftcdn.net/v2/jpg/02/43/12/34/1000...	50.00	1992-07-02	2
5	5	andrew@hotmail	66620	https://as1.ftcdn.net/v2/jpg/02/43/12/34/1000...	50.00	NULL	1
6	6	lawrence@gmail.com	6664	https://as1.ftcdn.net/v2/jpg/02/43/12/34/1000...	100.00	1988-06-09	3
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

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

1 • **SELECT** ur.user_role_type, wu.user_email
2 **FROM** web_user wu
3 **INNER JOIN** user_role ur **ON** wu.user_role_id = ur.user_role_id
4 **ORDER BY** ur.user_role_type, wu.user_email;

	user_role_type	user_email
▶	ADMIN	andrew@hotmail
	ADMIN	jack@gamil.com
	EDITOR	lawrence@gmail.com
	MEMBER	nancy@hotmail.com
	MEMBER	nick@yahoo.com
	MEMBER	tur08@temple.edu

Result 15 x

Output




#	Time	Action	Message	Duration / Fetch
✓ 120	18:21:31	SELECT ur.user_role_type, wu.user_email FROM we...	6 row(s) returned	0.016 sec / 0.000 sec

f) "OTHER": all rows, all columns, sorted by the id of your "other" table.


```

1 • SELECT
2     wu.web_user_id,
3     o.destination_name
4 FROM
5     web_user wu
6 JOIN
7     other o ON wu.web_user_id = o.web_user_id
8 ORDER BY
9     wu.web_user_id;
10

```

Result Grid 			 Filter Rows: <input type="text"/>		Export: 	Wrap Cell Content
	web_user_id	destination_name				
▶	1	Paris				
	2	Tokyo				
	3	Seoul				
	4	Sydney				
	5	New York				
	6	Mumbai				