1. STUDENT NAME
   Thomas Toal
2. URL to STUDENT WEB SITE
   http://cis-linux2.temple.edu:8080/fa21_3308_tuj55883/index.html#/blog
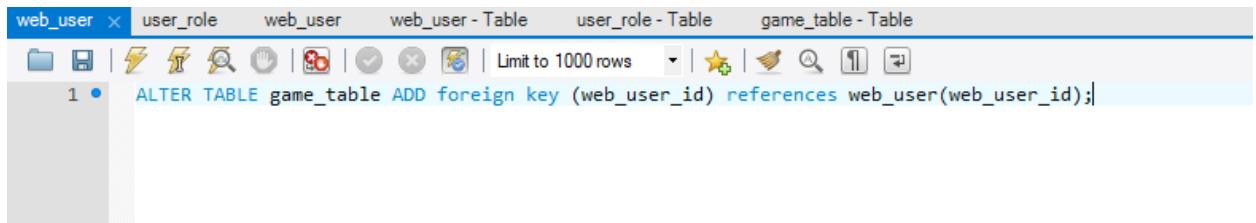3. user_role TABLE DESIGN

web_user | user_role | web_user | web_user - Table | user_role - Table ✕

Table Name: user_role   Schema: fa21_3308_tuj55883
Collation: latin1 - default collation   Engine: InnoDB

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
🔑 user_role_id	INT(11)	☑	☑	☑	☐	☐	☐	☐	☐	
◇ user_role_type	VARCHAR(10)	☐	☐	☑	☐	☐	☐	☐	☐	NULL

user_role - Table | web_user - Table | web_user ✕

```
1 • alter table web_user add foreign key (user_role_id) references user_role(user_role_id);
2
```

4. web_user TABLE DESIGN and FOREIGN KEY

web_user | user_role | web_user | web_user - Table ✕ | user_role - Table

Table Name: web_user   Schema: fa21_3308_tuj55883
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)	☑	☑	☑	☐	☐	☐	☑	☐	
◇ user_email	VARCHAR(45)	☐	☑	☑	☐	☐	☐	☐	☐	
◇ user_password	VARCHAR(45)	☐	☑	☐	☐	☐	☐	☐	☐	
◇ image	VARCHAR(300)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
◇ membership_fee	DECIMAL(8,2)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
◇ birthday	DATE	☐	☐	☐	☐	☐	☐	☐	☐	NULL
◆ user_role_id	INT(11)	☐	☑	☐	☐	☐	☐	☐	☐	

user_role - Table | web_user - Table | web_user ✕

```
1 • alter table web_user add foreign key (user_role_id) references user_role(user_role_id);
2
```

5. Other table design

web_user | user_role | web_user | web_user - Table | user_role - Table | game_table - Table ✕

Table Name: game_table   Schema: fa21_3308_tuj55883
Collation: latin1 - default collation   Engine: InnoDB

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
🔑 game_id	INT(11)	☑	☑	☐	☐	☐	☐	☑	☐	
◇ game_name	VARCHAR(45)	☐	☑	☑	☐	☐	☐	☐	☐	
◇ release_date	DATE	☐	☐	☐	☐	☐	☐	☐	☐	NULL
◇ price	DECIMAL(8,2)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
◇ genre	VARCHAR(45)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
◇ developer	VARCHAR(45)	☐	☑	☐	☐	☐	☐	☐	☐	
◇ img	VARCHAR(300)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
◆ web_user_id	INT(11)	☐	☑	☐	☐	☐	☐	☐	☐	

```
1 ●   ALTER TABLE game_table ADD foreign key (web_user_id) references web_user(web_user_id);
```

6. DATA ENTRY ERRORS

Apply SQL Script to Database

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

```
Executing:
INSERT INTO `fa21_3308_tuj55883`.`user_role` (`user_role_id`, `user_role_name`) VALUES ('1',
'ADMIN');
INSERT INTO `fa21_3308_tuj55883`.`user_role` (`user_role_id`, `user_role_name`) VALUES ('2',
'SUBMIN');
INSERT INTO `fa21_3308_tuj55883`.`user_role` (`user_role_id`, `user_role_name`) VALUES ('1',
'MULTMIN');

Operation failed: There was an error while applying the SQL script to the database.
ERROR 1062: 1062: Duplicate entry '1' for key 'PRIMARY'
SQL Statement:
INSERT INTO `fa21_3308_tuj55883`.`user_role` (`user_role_id`, `user_role_name`) VALUES ('1',
'MULTMIN')
```

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

```
Executing:
INSERT INTO `fa21_3308_tuj55883`.`web_user` (`user_email`, `user_password`, `membership_fee`,
`birthday`, `user_role_id`) VALUES ('ab@gmail.com', 'password', '2', '12/1/1947', '1');
INSERT INTO `fa21_3308_tuj55883`.`web_user` (`user_email`, `user_password`, `membership_fee`,
`birthday`, `user_role_id`) VALUES ('ac@gmail.com', '123456', '2', '1/3/1993', '2');
INSERT INTO `fa21_3308_tuj55883`.`web_user` (`user_email`, `user_password`, `membership_fee`,
`birthday`, `user_role_id`) VALUES ('ad@gmail.com', 'drowssap', '2', '2/28/2001', '3');
INSERT INTO `fa21_3308_tuj55883`.`web_user` (`user_email`, `user_password`, `membership_fee`,
`birthday`, `user_role_id`) VALUES ('ae@gmail.com', 'csabjijk', '2', '6/3/1982', '1');
INSERT INTO `fa21_3308_tuj55883`.`web_user` (`user_email`, `user_password`, `membership_fee`,
`birthday`, `user_role_id`) VALUES ('ag@gmail.com', 'pf93nNM', '2', '3/5/2000', '4');

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
(`fa21_3308_tuj55883`.`web_user`, CONSTRAINT `web_user_ibfk_1` FOREIGN KEY (`user_role_id`)
REFERENCES `user_role` (`user_role_id`))
SQL Statement:
INSERT INTO `fa21_3308_tuj55883`.`web_user` (`user_email`, `user_password`, `membership_fee`,
`birthday`, `user_role_id`) VALUES ('ag@gmail.com', 'pf93nNM', '2', '3/5/2000', '4')
```

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 `fa21_3308_tuj55883`.`user_role` WHERE `user_role_id`='1';

ERROR 1451: 1451: Cannot delete or update a parent row: a foreign key constraint fails
(`fa21_3308_tuj55883`.`web_user`, CONSTRAINT `web_user_ibfk_1` FOREIGN KEY (`user_role_id`)
REFERENCES `user_role` (`user_role_id`))
SQL Statement:
DELETE FROM `fa21_3308_tuj55883`.`user_role` WHERE `user_role_id`='1'
```

d) Invalid web_user FK in "other" record

Apply SQL Script to Database

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

Executing:
UPDATE `fa21_3308_tuj55883`.`game_table` SET `web_user_id`='15' WHERE `game_id`='17';

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
(`fa21_3308_tuj55883`.`game_table`, CONSTRAINT `game_table_ibfk_1` FOREIGN KEY
(`web_user_id`) REFERENCES `web_user` (`web_user_id`))
SQL Statement:
UPDATE `fa21_3308_tuj55883`.`game_table` SET `web_user_id`='15' WHERE `game_id`='17'

Hide Logs   Back   Finish   Cancel

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

```
Executing:
DELETE FROM `fa21_3308_tuj55883`.`web_user` WHERE `web_user_id`='12';

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
(`fa21_3308_tuj55883`.`game_table`, CONSTRAINT `game_table_ibfk_1` FOREIGN KEY
(`web_user_id`) REFERENCES `web_user` (`web_user_id`))
SQL Statement:
DELETE FROM `fa21_3308_tuj55883`.`web_user` WHERE `web_user_id`='12'
```

Hide Logs   Back   Finish   Cancel

7. SELECT STATEMENTS

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

```sql
1 ● SELECT * FROM fa21_3308_tuj55883.user_role
2   ORDER BY `user_role_id` DESC;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

user_role_id	user_role_name
3	MULTMIN
2	SUBMIN
1	ADMIN
NULL	NULL

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

```sql
1 ● SELECT * FROM fa21_3308_tuj55883.web_user
2   ORDER BY `web_user_id` DESC;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

web_user_id	user_email	user_password	image	membership_fee	birthday	user_role_id
12	null@gmail	fasik	ads.png	NULL	NULL	1
10	aa@gmail.com	pf93nNM	NULL	2.00	0000-00-00	2
9	ae@gmail.com	csabiik	NULL	2.00	0000-00-00	1
8	ad@gmail.com	drowssap	NULL	2.00	0000-00-00	3
6	ab@gmail.com	password	beanstalk.jpg	2.00	1999-01-01	1
NULL	NULL	NULL	NULL	NULL	NULL	NULL

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

```sql
1   SELECT web_user_id, user_email, user_password, image, membership_fee, birthday, web_user.user_role_id, user_role_name
2   FROM web_user, user_role
3   WHERE web_user.user_role_id = user_role.user_role_id;
```

web_user_id	user_email	user_password	image	membership_fee	birthday	user_role_id	user_role_name
6	ab@gmail.com	password	beanstalk.jpg	2.00	1999-01-01	1	ADMIN
8	ad@gmail.com	drowssap	NULL	2.00	0000-00-00	3	MULTMIN
9	ae@gmail.com	csabijik	NULL	2.00	0000-00-00	1	ADMIN
10	ag@gmail.com	pf93nNM	NULL	2.00	0000-00-00	2	SUBMIN
12	null@gmail	fasik	ads.png	NULL	NULL	1	ADMIN

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

```sql
1   SELECT * FROM fa21_3308_tuj55883.game_table
2   ORDER BY `game_id` DESC;
```

game_id	game_name	release_date	price	genre	developer	img	web_user_id
16	A Way Out	2018-03-23	40.00	Co-op	HazeLight	NULL	12
15	Ashen	2018-12-07	35.00	Action	A44	NULL	8
14	SpeedRunners	2013-08-26	20.00	Multiplayer	TinyBuild	NULL	9
13	Twelve Minutes	2021-08-19	15.00	Mystery	Luis Antonio	NULL	12
12	Quint	NULL	NULL	NULL	Dream Studios	NULL	10
11	Fall Guys	2020-02-26	20.00	Battle Royale	Mediatonic	NULL	9
10	Among Us	2018-08-31	5.00	Multiplayer	InnerSloth	NULL	8
1	Shovel Knight	2014-06-26	30.00	Adventure	Yacht Club	pics/shovelKnight.jpg	6
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

game_table 9 ×

Output

Action Output

#	Time	Action	Message
23	14:22:32	DELETE FROM `fa21_3308_tuj55883`.`web_user` WHERE `web_user_id`='12'	1451: Cannot delete or update a parent row: a foreign key constraint fa
24	14:24:21	SELECT * FROM fa21_3308_tuj55883.game_table LIMIT 0, 1000	8 row(s) returned
25	14:24:39	SELECT * FROM fa21_3308_tuj55883.game_table ORDER BY `game_id` DESC LIMIT 0, 1000	8 row(s) returned
26	14:32:57	SELECT game_table.game_name, web_user.user_email FROM game_table INNER JOIN web_user ON game_table....	8 row(s) returned
27	14:33:56	SELECT game_table.game_name, web_user.user_email FROM game_table INNER JOIN web_user ON game_table....	8 row(s) returned
28	14:35:09	SELECT * FROM fa21_3308_tuj55883.game_table ORDER BY `game_id` DESC LIMIT 0, 1000	8 row(s) returned

g) "OTHER" JOINED WITH WEB_USER all rows, certain columns, sorted.

```
1   SELECT game_table.game_name, web_user.user_email
2   FROM game_table
3   INNER JOIN web_user ON game_table.web_user_id=web_user.web_user_id;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

game_name	user_email
Shovel Knight	ab@gmail.com
Among Us	ad@gmail.com
Ashen	ad@gmail.com
Fall Guys	ae@gmail.com
SpeedRunners	ae@gmail.com
Quint	ag@gmail.com
Twelve Minutes	null@gmail
A Way Out	null@gmail

Result 3 ✕

Output

Action Output ▾

#	Time	Action	Message
✓	22	14:22:14	SELECT * FROM fa21_3308_tuj55883.web_user LIMIT 0, 1000	5 row(s) returned
✗	23	14:22:32	DELETE FROM `fa21_3308_tuj55883`.`web_user` WHERE `web_user_id`='12'	1451: Cannot delete or update a parent row: a foreign
✓	24	14:24:21	SELECT * FROM fa21_3308_tuj55883.game_table LIMIT 0, 1000	8 row(s) returned
✓	25	14:24:39	SELECT * FROM fa21_3308_tuj55883.game_table ORDER BY `game_id` DESC LIMIT 0, 1000	8 row(s) returned
✓	26	14:32:57	SELECT game_table.game_name, web_user.user_email FROM game_table INNER JOIN web_user ON game_table....	8 row(s) returned
✓	27	14:33:56	SELECT game_table.game_name, web_user.user_email FROM game_table INNER JOIN web_user ON game_table....	8 row(s) returned

h) "OTHER" JOINED WITH WEB_USER some rows, certain columns, sorted.

```sql
SELECT game_table.game_name, web_user.user_email
FROM game_table
INNER JOIN web_user ON game_table.web_user_id=web_user.web_user_id
WHERE user_email = "ae@gmail.com";
```

game_name	user_email
Fall Guys	ae@gmail.com
SpeedRunners	ae@gmail.com

Result Grid | Filter Rows: | Export: | Wrap Cell Content: ⱯA

Result 4 ×

Output

Action Output ▼

#	Time	Action	Message
24	14:24:21	SELECT * FROM fa21_3308_tuj55883.game_table LIMIT 0, 1000	8 row(s) returned
25	14:24:39	SELECT * FROM fa21_3308_tuj55883.game_table ORDER BY `game_id` DESC LIMIT 0, 1000	8 row(s) returned
26	14:32:57	SELECT game_table.game_name, web_user.user_email FROM game_table INNER JOIN web_user ON game_table....	8 row(s) returned
27	14:33:56	SELECT game_table.game_name, web_user.user_email FROM game_table INNER JOIN web_user ON game_table....	8 row(s) returned
28	14:35:09	SELECT * FROM fa21_3308_tuj55883.game_table ORDER BY `game_id` DESC LIMIT 0, 1000	8 row(s) returned
29	14:37:42	SELECT game_table.game_name, web_user.user_email FROM game_table INNER JOIN web_user ON game_table....	2 row(s) returned