

Table Name:

Schema:

fa24_3308_tuo18991

Charset/Collation:

Default Charset

Default Collation

Engine:

InnoDB

Comments:

Foreign Key Name	Referenced Table	Column	Referenced Column	Foreign Key Options
web_user_ibfk_1	fa24_3308_tuo18991	user_role		<div>On Update:</div> <div>On Delete:</div> <div><input type="checkbox"/> Skip in SQL generation</div>

5. "OTHER" TABLE DESIGN and FOREIGN KEY

user_bike - Table

web_user - Table




Table Name:










Schema: **fa24_3308_tuo18991**

Charset/Collation:

Default Collation:

Engine:

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
 bike_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"/>	
 bike_name	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"/>	
 bike_image	VARCHAR(600)	<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
 bike_price	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
 year_manufactured	YEAR(4)	<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
 bike_brand	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
 bike_model	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
 bike_type	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
 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"/>	

user_bike - Table

web_user - Table




Table Name:

Schema: **fa24_330**

Charset/Collation:

Default Collation:

Engine:

Comments:

Foreign Key Name	Referenced Table
user_bike_ibfk_1	`fa24_3308_tuo18991`.`web_user`


Column	Referenced Column
<input type="checkbox"/> bike_id	
<input type="checkbox"/> bike_name	
<input type="checkbox"/> bike_image	
<input type="checkbox"/> bike_price	
<input type="checkbox"/> year_manufactu...	
<input type="checkbox"/> bike_brand	
<input type="checkbox"/> bike_model	
<input type="checkbox"/> bike_type	
<input checked="" type="checkbox"/> web_user_id	web_user_id

6. DATA ENTRY ERRORS

a) Error: Duplicate user_role PK

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 `fa24_3308_tuo18991`.`user_role` (`user_role_id`, `user_role_type`) VALUES ('1',
'ADMIN1');

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 `fa24_3308_tuo18991`.`user_role` (`user_role_id`, `user_role_type`) VALUES ('1',
'ADMIN1')
```

b) Error: Invalid user_role FK in web_user record

 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:
UPDATE `fa24_3308_tuo18991`.`web_user` SET `user_role_id` = '3' WHERE (`web_user_id` = '3');

ERROR 1452: 1452: Cannot add or update a child row: a foreign key constraint fails
(`fa24_3308_tuo18991`.`web_user`, CONSTRAINT `web_user_ibfk_1` FOREIGN KEY (`user_role_id`)
REFERENCES `user_role` (`user_role_id`))
SQL Statement:
UPDATE `fa24_3308_tuo18991`.`web_user` SET `user_role_id` = '3' WHERE (`web_user_id` = '3')
```

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

❌ Execute SQL Statements

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

Message Log

```
Executing:
UPDATE `fa24_3308_tuo18991`.`user_role` SET `user_role_type` = NULL WHERE (`user_role_id` = '1');

Operation failed: There was an error while applying the SQL script to the database.
ERROR 1048: 1048: Column 'user_role_type' cannot be null
SQL Statement:
UPDATE `fa24_3308_tuo18991`.`user_role` SET `user_role_type` = NULL 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

```
Operation failed: There was an error while applying the SQL script to the database.
Executing:
UPDATE `fa24_3308_tuo18991`.`user_bike` SET `web_user_id` = '6' WHERE (`bike_id` = '11');

ERROR 1452: 1452: Cannot add or update a child row: a foreign key constraint fails
(`fa24_3308_tuo18991`.`user_bike`, CONSTRAINT `user_bike_ibfk_1` FOREIGN KEY (`web_user_id`)
REFERENCES `web_user` (`web_user_id`))
SQL Statement:
UPDATE `fa24_3308_tuo18991`.`user_bike` SET `web_user_id` = '6' WHERE (`bike_id` = '11')
```

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

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.

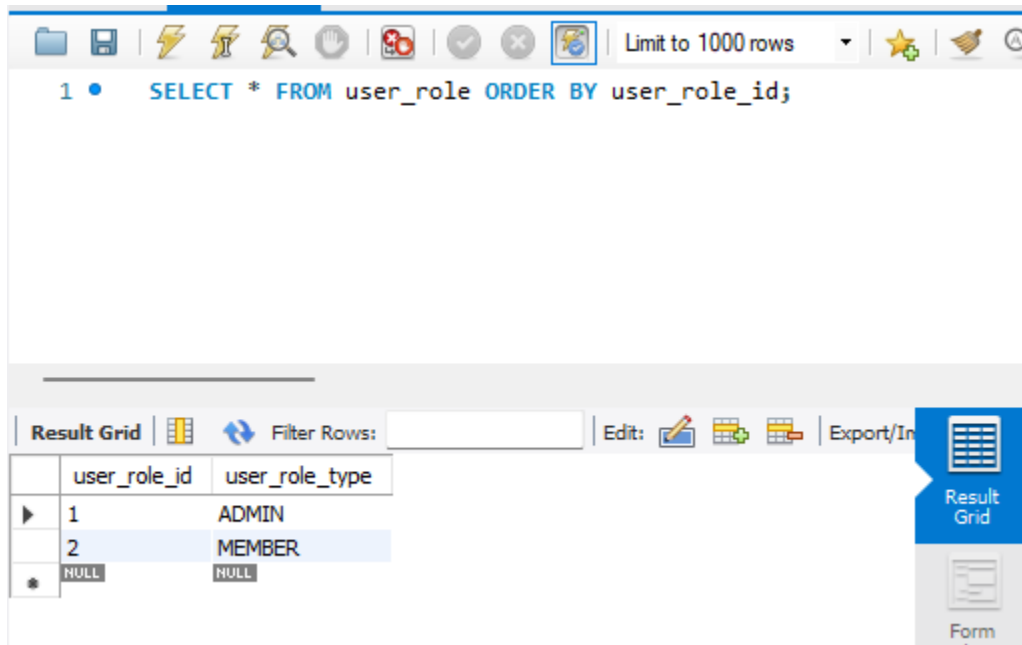
Message Log

```
Executing:
DELETE FROM `fa24_3308_tuo18991`.`web_user` WHERE (`web_user_id` = '5');

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_tuo18991`.`user_bike`, CONSTRAINT `user_bike_ibfk_1` FOREIGN KEY (`web_user_id`)
REFERENCES `web_user` (`web_user_id`))
SQL Statement:
DELETE FROM `fa24_3308_tuo18991`.`web_user` WHERE (`web_user_id` = '5')
```

7. SELECT STATEMENTS

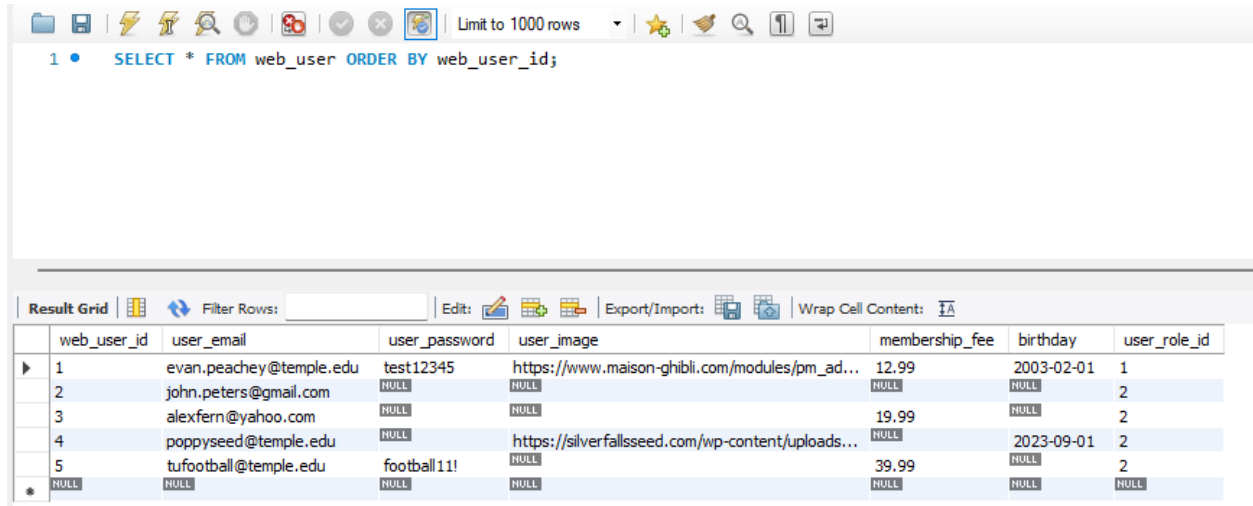
a) USER_ROLE: all rows, all columns, sorted by user_role_id.



The screenshot shows a database management interface. At the top, there is a toolbar with various icons. Below the toolbar, a SQL query is entered in a text area: `1 • SELECT * FROM user_role ORDER BY user_role_id;`. Below the query area, there is a section for the results. It includes a "Result Grid" button, a "Filter Rows:" input field, and an "Edit:" button. The results are displayed in a table with two columns: "user_role_id" and "user_role_type". The table contains two rows: one with "1" and "ADMIN", and another with "2" and "MEMBER". There is also a row with "NULL" and "NULL".

user_role_id	user_role_type
1	ADMIN
2	MEMBER
NULL	NULL

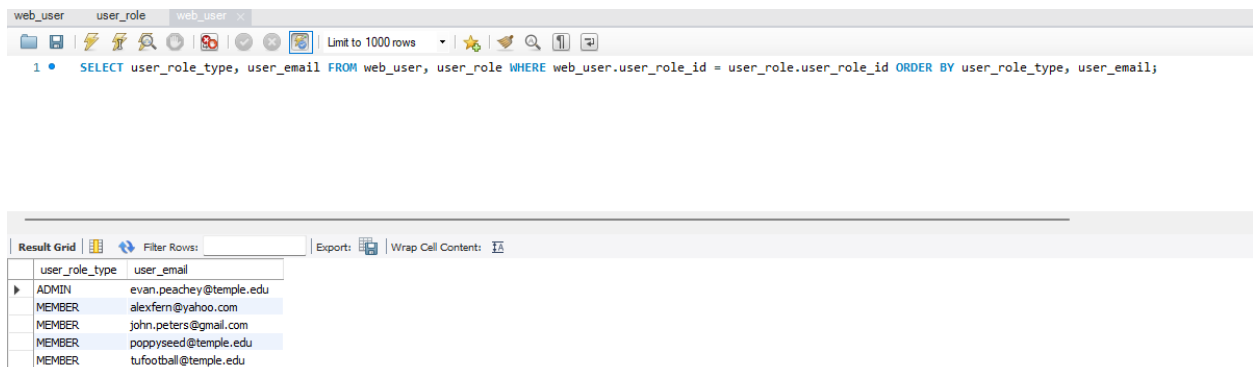
b) WEB_USER: all rows, all columns, sorted by web_user_id.



The screenshot shows a database query interface. At the top, there is a toolbar with various icons and a dropdown menu set to "Limit to 1000 rows". Below the toolbar, a SQL query is entered: `1 • SELECT * FROM web_user ORDER BY web_user_id;`. The results are displayed in a "Result Grid" below the query editor. The grid has columns for `web_user_id`, `user_email`, `user_password`, `user_image`, `membership_fee`, `birthday`, and `user_role_id`. The data is sorted by `web_user_id`.

	web_user_id	user_email	user_password	user_image	membership_fee	birthday	user_role_id
▶	1	evan.peachey@temple.edu	test12345	https://www.maison-ghibli.com/modules/pm_ad...	12.99	2003-02-01	1
	2	john.peters@gmail.com	NULL	NULL	NULL	NULL	2
	3	alexfern@yahoo.com	NULL	NULL	19.99	NULL	2
	4	poppyseed@temple.edu	NULL	https://silverfallsseed.com/wp-content/uploads...	NULL	2023-09-01	2
	5	tufotball@temple.edu	football11!	NULL	39.99	NULL	2
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

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



The screenshot shows a database query interface with two tabs: `web_user` and `user_role`. The `web_user` tab is active. The toolbar shows "Limit to 1000 rows". The SQL query is: `1 • SELECT user_role_type, user_email FROM web_user, user_role WHERE web_user.user_role_id = user_role.user_role_id ORDER BY user_role_type, user_email;`. The results are displayed in a "Result Grid" below the query editor. The grid has columns for `user_role_type` and `user_email`. The data is sorted by `user_role_type`.

	user_role_type	user_email
▶	ADMIN	evan.peachey@temple.edu
	MEMBER	alexfern@yahoo.com
	MEMBER	john.peters@gmail.com
	MEMBER	poppyseed@temple.edu
	MEMBER	tufotball@temple.edu

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

Limit to 1000 rows

```
1 • SELECT * FROM user_bike SORTED ORDER BY bike_id;
```

	bike_id	bike_name	bike_image	bike_price	year_manufactured	bike_brand	bike_model	bike_type	web_user_id
▶	1	Speed Demon	https://c02.purpledshub.com/uploads/sites/39/...	1999.99	2023	Trek	Emonda	Road	1
	2	Mountaineer		159.99	1999	NULL	NULL	Mountain	1
	3	Black Betty	https://c02.purpledshub.com/uploads/sites/39/...	4499.99	2024	Giant	Propel	Road	1
	4	Bike1	NULL	NULL	2003	Specialized	NULL	Mountain	2
	5	Bike2	NULL	NULL	NULL	NULL	NULL	Road	2
	6	Fixie	https://upload.wikimedia.org/wikipedia/common...	250.00	2014	NULL	NULL	Fixed	3
	7	Bike3	NULL	NULL	NULL	NULL	NULL	NULL	4
	8	Bike4	NULL	NULL	NULL	NULL	NULL	NULL	4
	9	Bike5	NULL	NULL	NULL	NULL	NULL	NULL	5
	10	Bike6	NULL	NULL	NULL	NULL	NULL	NULL	5
	11	Bike7	NULL	NULL	NULL	NULL	NULL	NULL	5
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

user_bike 1 x

Output

Action Output

#	Time	Action	Message
✓ 1	15:04:22	SELECT * FROM user_bike SORTED ORDER BY bike_id LIMIT 0, 1000	11 row(s) returned

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

web_user user_bike user_bike user_bike - Table

Limit to 1000 rows

1 • `SELECT bike_name, user_email FROM user_bike, web_user WHERE user_bike.web_user_id = web_user.web_user_id ORDER BY user_email, bike_name;`

Result Grid

	bike_name	user_email
▶	Fixie	alexfern@yahoo.com
	Black Betty	evan.peachey@temple.edu
	Mountaineer	evan.peachey@temple.edu
	Speed Demon	evan.peachey@temple.edu
	Bike1	john.peters@gmail.com
	Bike2	john.peters@gmail.com
	Bike3	poppyseed@temple.edu
	Bike4	poppyseed@temple.edu
	Bike5	tufootball@temple.edu
	Bike6	tufootball@temple.edu
	Bike7	tufootball@temple.edu

Result 5 x

Output

Action Output

#	Time	Action	Message
✓ 4	10:29:33	<code>SELECT bike_name, user_email FROM user_bike, web_user ORDER BY bike_name, user_email LIMIT 0, 1000</code>	55 row(s) returned
✗ 5	10:32:51	<code>SELECT bike_name, user_email FROM user_bike, web_user WHERE bike_user.web_user_id = web_user.web_user_id ORDER BY bike_name, use...</code>	Error Code: 1064. You have an error in your SQL syntax
✗ 6	10:33:11	<code>SELECT bike_name, user_email FROM user_bike, web_user WHERE user_bike.web_user_id = web_user.web_user_id ORDER BY bike_name, use...</code>	Error Code: 1064. You have an error in your SQL syntax
✓ 7	10:33:40	<code>SELECT * FROM fa24_3308_tuo18991.user_bike LIMIT 0, 1000</code>	11 row(s) returned
✓ 8	10:34:04	<code>SELECT bike_name, user_email FROM user_bike, web_user WHERE user_bike.web_user_id = web_user.web_user_id ORDER BY bike_name, use...</code>	11 row(s) returned
✓ 9	10:34:27	<code>SELECT bike_name, user_email FROM user_bike, web_user WHERE user_bike.web_user_id = web_user.web_user_id ORDER BY user_email, bik...</code>	11 row(s) returned

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

The screenshot shows a database query editor with a SQL query and its results. The query is:

```
1 • SELECT bike_name, user_email FROM user_bike, web_user WHERE user_bike.web_user_id = web_user.web_user_id AND user_email = 'tufootball@temple.edu' ORDER BY user_email, bike_name;
```

The results are displayed in a table with two columns: bike_name and user_email. The results are:

bike_name	user_email
Bike5	tufootball@temple.edu
Bike6	tufootball@temple.edu
Bike7	tufootball@temple.edu

The bottom section of the screenshot shows the "Output" tab with a table of actions and messages:

#	Time	Action	Message
7	10:33:40	SELECT * FROM fa24_3308_tuo18991 user_bike LIMIT 0, 1000	11 row(s) returned
8	10:34:04	SELECT bike_name, user_email FROM user_bike, web_user WHERE user_bike.web_user_id = web_user.web_user_id ORDER BY bike_name, use...	11 row(s) returned
9	10:34:27	SELECT bike_name, user_email FROM user_bike, web_user WHERE user_bike.web_user_id = web_user.web_user_id ORDER BY user_email, bik...	11 row(s) returned
10	10:41:06	SELECT bike_name, user_email FROM user_bike, web_user WHERE user_bike.web_user_id = web_user.web_user_id, web_user.user_email = tufo...	Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds to your MariaDB s
11	10:41:26	SELECT bike_name, user_email FROM user_bike, web_user WHERE user_bike.web_user_id = web_user.web_user_id, user_email tufootball@temp...	Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds to your MariaDB s
12	10:43:13	SELECT bike_name, user_email FROM user_bike, web_user WHERE user_bike.web_user_id = web_user.web_user_id AND user_email = tufootball...	3 row(s) returned