

# library-management-system

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A frontend application for managing the resources and memberships of a university library stored in MySQL Server.

## Steps to run this project

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Installation requirements :

```
python3 -m venv env_flask  
pip3 install flask  
pip3 install flask-mysqldb  
pip3 install pyyaml
```

MySQL Server (Workbench) should also be installed. Dump the library schema with dummy values using the following command in MySQL:

```
source dumpfile.sql;
```

One must configure the db.yaml file to connect to the MySQL Server.

```
mysql_host: 'localhost'  
mysql_user: 'root'  
mysql_password: '<enter your password>'  
mysql_db: '<enter the name of the database which can be imported from the  
dump file>'
```

After cloning the repository and entering into the `library-management-system` folder :

```
cd flask-website  
python app.py
```

Click on the URL `http://127.0.0.1:5000` to visit the Library Management System website.

## Contents of this repository

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- The relations were added to the database from the MySQL client command line. The schema with dummy values of our database can be found in the `dumpfile.sql` file.
- A Python script was used to add dummy data to our tables. This script can be found in the `insert_dummy_values.py` file.
- The Flask website code is found inside the `flask-website` folder.

## Snapshots of the functioning of the website

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The functioning of the INSERT, DELETE and UPDATE queries has been shown through the following snapshots of the website. We have also shown some cases where our web app gives errors like foreign key constraints are violated, duplicate primary keys, etc.

### **View Of Users Relation**

## Library Management System

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[System\\_Allocation](#) [Library\\_Staff\\_Working\\_Hours](#)

Show  entries Search:

user_id	user_name	Delete
101	Kim	X
102	Bob	X
103	Slya	X
123	Snape	X
200	Rachel	X
301	Sam	X
302	Sam	X
401	Gita	X
561	Monica	X
601	Harry	X
602	Ginny	X
603	Hermoine	X

  

602	Ginny	X
603	Hermoine	X
604	Ron	X
605	Neville	X
721	Chandler	X
723	Lily	X
811	Ross	X
922	Phoebe	X

Showing 1 to 18 of 18 entries

Input Values to be Inserted

user_id	<input type="text"/>
user_name	<input type="text"/>
<input type="button" value="Add"/>	

© Library Management System

CS432 - Database Management System

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## View Of Users Relation in Workbench

MySQLWorkbench File Edit View Query Database Server Tools Scripting Help Local instance 3306 MySQL Workbench Administration Schemas Query 4 Users - Table Users Context Help Snippets

Result Grid Filter Rows: Search Edit: Export/Import: Result Grid Form Editor Field Types Query Stats Execution Plan

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

SCHEMAS Publishers Publishers\_Phone Purchase Staff Strike Student System\_Allocation Transaction User\_Issue Users Columns Indexes Foreign Keys Triggers Views Users\_Phone Views Standard Procedures

Object Info Session

Table: Users

Columns:

user_ID	int PK
User_name	varchar(45)

Users 1 Apply Revert

Action Output

Time	Action	Response	Duration / Fetch Time
19:04:46	SELECT * FROM assignment_6.Users LIMIT 0, 1000	18 row(s) returned	0.00047 sec / 0.0000...

Query Completed

user_ID	User_name
101	Kim
102	Bob
103	Siya
123	Snape
200	Rachel
301	Sam
302	Sam
401	Gita
501	Monica
601	Harry
602	Gina
603	Hermione
604	Ron
605	Neville
721	Chandler
723	Lily
811	Ross
922	Phoebe

## Adding Entry in Users Relation

301	Sam	X
302	Sam	X
401	Gita	X
561	Monica	X
601	Harry	X
602	Ginny	X
603	Hermoine	X
604	Ron	X
605	Neville	X
721	Chandler	X
723	Lily	X
811	Ross	X
922	Phoebe	X

Showing 1 to 18 of 18 entries

Previous 1 Next

Input Values to be Inserted

user_id	989
user_name	Stefan

Add

user_id	user_name	Delete
101	Kim	X
102	Bob	X
103	Siya	X
123	Snape	X
200	Rachel	X
301	Sam	X
302	Sam	X
401	Gita	X
561	Monica	X
601	Harry	X
602	Ginny	X
603	Hermoine	X
604	Ron	X
605	Neville	X
721	Chandler	X
723	Lily	X
811	Ross	X
922	Phoebe	X
989	Stefan	X

Showing 1 to 19 of 19 entries

Previous 1 Next

MySQLWorkbench File Edit View Query Database Server Tools Scripting Help

Local instance 3306 MySQL Workbench

Administration Schemas Query 4 Users - Table Users Context Help Snippets

Result Grid Filter Rows: Search Edit: Export/Import:

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid Form Editor Field Types Query Stats Execution Plan

SCHEMAS Publishers Publishers\_Phone Purchase Staff Strike Student System\_Allocation Transaction User\_Issue Users Columns Indexes Foreign Keys Triggers Users\_Phone Views

Table: Users

Columns:

<b>user_ID</b>	int PK
User_name	varchar(45)

Object Info Session

Table: Users

Users 1

Action Output

	Time	Action	Response	Duration / Fetch Time
1	19:04:46	SELECT * FROM assignment_6.Users LIMIT 0, 1000	18 row(s) returned	0.00047 sec / 0.0000...
2	19:07:10	SELECT * FROM assignment_6.Users LIMIT 0, 1000	19 row(s) returned	0.00042 sec / 0.0000...

Query Completed

## Updating Entry in Users Relation

user_id	user_name	Delete
101	Kim	X
102	Bob	X
103	Siya	X
123	Snape	X
200	Rachel	X
301	Sam	X
302	Sam	X
401	Gita	X
561	Monica	X
601	Harry	X
602	Ginny	X
603	Hermoine	X
604	Ron	X
605	Neville	X
721	Chandler	X

update

Stefan



Showing 1 to 19 of 19 entries

Previous 1 Next

user_id	user_name	Delete
101	Kim	X
102	Bob	X
103	Siya	X
123	Snape	X
200	Rachel	X
301	Sam	X
302	Sam	X
401	Gita	X
561	Monica	X
601	Harry	X
602	Ginny	X
603	Hermoine	X
604	Ron	X
605	Neville	X
721	Chandler	X

update

Damon



Showing 1 to 19 of 19 entries

Previous 1 Next

user_id	user_name	Delete
101	Kim	X
102	Bob	X
103	Siya	X
123	Snape	X
200	Rachel	X
301	Sam	X
302	Sam	X
401	Gita	X
561	Monica	X
601	Harry	X
602	Ginny	X
603	Hermoine	X
604	Ron	X
605	Neville	X
721	Chandler	X
723	Lily	X
811	Ross	X
922	Phoebe	X
989	Damon	X

Showing 1 to 19 of 19 entries

Previous 1 Next

The screenshot shows the MySQL Workbench interface. The top menu bar includes File, Edit, View, Query, Database, Server, Tools, Scripting, and Help. The title bar indicates "MySQL Workbench" and the date "Wed 30 Mar 7:08:40 PM". The left sidebar displays the database schema with the "Users" table selected. The main area shows a "Result Grid" with the following data:

user_ID	User_name
101	Kim
102	Bob
103	Siya
123	Snape
200	Rachel
301	Sam
302	Sam
401	Gita
561	Monica
601	Harry
602	Ginny
603	Hermoine
604	Ron
605	Neville
721	Chandler
723	Lily
811	Ross
922	Phoebe
989	Damon
NULL	NULL

The right side of the interface includes various toolbars and a context help panel stating: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help." The bottom status bar shows "Query Completed".

## Deleting Entry in Users Relation

user_id	user_name	Delete
101	Kim	X
102	Bob	X
103	Siya	X
123	Snape	X
200	Rachel	X
301	Sam	X
302	Sam	X
401	Gita	X
561	Monica	X
601	Harry	X
602	Ginny	X
603	Hermoine	X
604	Ron	X
605	Neville	X
721	Chandler	X
723	Lily	X
811	Ross	X
922	Phoebe	X
989	Damon	X

Showing 1 to 19 of 19 entries

Previous 1 Next

Show All entries

Search:

user_id	user_name	Delete
101	Kim	X
102	Bob	X
103	Siya	X
123	Snape	X
200	Rachel	X
301	Sam	X
302	Sam	X
401	Gita	X
561	Monica	X
601	Harry	X
602	Ginny	X
603	Hermoine	X
604	Ron	X
605	Neville	X
721	Chandler	X
723	Lily	X
811	Ross	X
922	Phoebe	X

Showing 1 to 18 of 18 entries

Previous 1 Next

## View Of Transactions Relation

**Library Management System**

Users    Users\_Phone    Student    Faculty    Staff    Library\_Staff    Other\_Staff    Library\_Systems    Books    Books\_Purchase    Publishers    Publishers\_Phone  
 Authors    Genres    Location    **Transaction**    Penalties    Purchase    Book\_Issue    User\_Issue    Strike    Book\_Pub    Book\_Auth    Book\_Genre    Book\_Location  
 System\_Allocation    Library\_Staff\_Working\_Hours

Show 10 entries      Search:

transaction_ID	issue_date	expected_return_date	actual_return_date	Delete
4211	2021-07-15 00:00:00	2021-07-24 00:00:00	2021-07-20 00:00:00	X
4230	2021-07-14 00:00:00	2021-07-20 00:00:00	2021-07-22 00:00:00	X
4232	2021-07-12 00:00:00	2021-07-20 00:00:00	2021-07-23 00:00:00	X
4238	2021-07-12 00:00:00	2021-07-20 00:00:00	2021-07-24 00:00:00	X
4278	2021-03-10 00:00:00	2022-07-15 00:00:00	2022-07-20 00:00:00	X
4473	2021-07-11 00:00:00	2021-07-24 00:00:00	2021-07-20 00:00:00	X
4898	2022-03-03 00:00:00	2022-04-05 00:00:00	None	X

Showing 1 to 7 of 7 entries      Previous 1 Next

## Adding Entry in Transactions Relation

Show 10 entries Search:

transaction_ID	issue_date	expected_return_date	actual_return_date	Delete
4211	2021-07-15 00:00:00	2021-07-24 00:00:00	2021-07-20 00:00:00	X
4230	2021-07-14 00:00:00	2021-07-20 00:00:00	2021-07-22 00:00:00	X
4232	2021-07-12 00:00:00	2021-07-20 00:00:00	2021-07-23 00:00:00	X
4238	2021-07-12 00:00:00	2021-07-20 00:00:00	2021-07-24 00:00:00	X
4278	2021-03-10 00:00:00	2022-07-15 00:00:00	2022-07-20 00:00:00	X
4473	2021-07-11 00:00:00	2021-07-24 00:00:00	2021-07-20 00:00:00	X
4898	2022-03-03 00:00:00	2022-04-05 00:00:00	None	X

Showing 1 to 7 of 7 entries

Previous 1 Next

Input Values to be Inserted

transaction_ID	4980
issue_date	2022-03-30
expected_return_date	2022-04-05
actual_return_date	NULL

Show 10 entries Search:

Showing 1 to 8 of 8 entries

transaction_ID	issue_date	expected_return_date	actual_return_date	Delete
4211	2021-07-15 00:00:00	2021-07-24 00:00:00	2021-07-20 00:00:00	X
4230	2021-07-14 00:00:00	2021-07-20 00:00:00	2021-07-22 00:00:00	X
4232	2021-07-12 00:00:00	2021-07-20 00:00:00	2021-07-23 00:00:00	X
4238	2021-07-12 00:00:00	2021-07-20 00:00:00	2021-07-24 00:00:00	X
4278	2021-03-10 00:00:00	2022-07-15 00:00:00	2022-07-20 00:00:00	X
4473	2021-07-11 00:00:00	2021-07-24 00:00:00	2021-07-20 00:00:00	X
4898	2022-03-03 00:00:00	2022-04-05 00:00:00	None	X
4980	2022-03-30 00:00:00	2022-04-05 00:00:00	None	X

Showing 1 to 8 of 8 entries

Previous 1 Next

Input Values to be Inserted

transaction_ID	
issue_date	
expected_return_date	
actual_return_date	

MySQL Workbench File Edit View Query Database Server Tools Scripting Help 24% Wed 30 Mar 7:34:31 PM

Local instance 3306 MySQL Workbench

Administration Schemas Query 4 Transaction Context Help Snippets

**Result Grid** Filter Rows: Search Edit: Export/Import: Result Grid Form Editor Field Types Query Stats Execution Plan

**Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.**

**SCHEMAS**

- > Publishers
- > Publishers\_Photo
- > Purchase
- > Staff
- > Strike
- > Student
- > System\_Allocation
- > Transaction
- > User\_Issue
- Users
  - > Columns
  - > Indexes
  - > Foreign Keys
  - > Triggers
  - > Users\_Photo
- Views

**Object Info Session**

**Table: Transaction**

**Columns:**

transaction_ID	int PK
issue_date	datetime
expected_return_date	datetime
actual_return_date	datetime

Transaction 1 Apply Revert

Action Output

Time	Action	Response	Duration / Fetch Time
4	SELECT * FROM assignment_6.Transaction LIMIT 0, 1000	8 row(s) returned	0.00000 sec / 0.000...
5	19:34:17 SELECT * FROM assignment_6.Transaction LIMIT 0, 1000	8 row(s) returned	0.00048 sec / 0.000...

Query Completed

## Adding Entry in User\_Issue Relation

## Library Management System

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[System\\_Allocation](#) [Library\\_Staff\\_Working\\_Hours](#)

Show 10 entries

Search:

transaction_ID	user_ID	Delete
4238	101	X
4278	103	X
4898	200	X

Showing 1 to 3 of 3 entries

[Previous](#) [1](#) [Next](#)

**Input Values to be Inserted**

transaction_ID	<input type="text" value="4980"/>
user_ID	<input type="text" value="922"/>
<a href="#" style="border: 1px solid black; padding: 2px 10px; background-color: #e0f2e0;">Add</a>	

## Library Management System

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[System\\_Allocation](#) [Library\\_Staff\\_Working\\_Hours](#)

Show 10 entries

Search:

transaction_ID	user_ID	Delete
4238	101	X
4278	103	X
4898	200	X
4980	922	X

Showing 1 to 4 of 4 entries

[Previous](#) [1](#) [Next](#)

**Input Values to be Inserted**

transaction_ID	<input type="text"/>
user_ID	<input type="text"/>
<a href="#" style="border: 1px solid black; padding: 2px 10px; background-color: #e0f2e0;">Add</a>	

MySQLWorkbench File Edit View Query Database Server Tools Scripting Help

Local instance 3306 MySQL Workbench

Administration Schemas Query 4 User\_Issue Context Help Snippets

Result Grid Filter Rows: Search Edit: Export/Import:

transaction\_ID user\_ID

4238	101
4278	103
4898	200
4980	922
NULL	NULL

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid Form Editor Field Types Query Stats Execution Plan

Object Info Session

Table: User\_Issue

Columns:

transaction_ID	int PK
user_ID	int

User\_Issue 1 Apply Revert

Action Output

Time	Action	Response	Duration / Fetch Time
6 19:34:40	SELECT * FROM assignment_6.User_Issue LIMIT 0, 1000	3 rows(s) returned 4 row(s) returned	0.00029 sec / 0.0000...

Query Completed

The screenshot shows the MySQL Workbench interface with the 'User\_Issue' table selected. The 'Result Grid' pane displays four rows of data from the 'User\_Issue' table. The 'Execution Plan' pane on the right shows the query 'SELECT \* FROM assignment\_6.User\_Issue LIMIT 0, 1000' with a duration of 0.00029 sec and a fetch time of 0.0000... The 'Action Output' pane at the bottom shows the same query with a response of 4 row(s) returned. The left sidebar shows the database schema with 'User\_Issue' selected. The bottom status bar indicates 'Query Completed'.

## Adding Entry in Book\_Issue Relation

## Library Management System

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[System\\_Allocation](#) [Library\\_Staff\\_Working\\_Hours](#)

Show  entries

Search:

transaction_ID	book_ID	Delete
4232	45678	X
4238	12345	X
4278	34567	X
4898	23456	X

Showing 1 to 4 of 4 entries

Previous  Next

**Input Values to be Inserted**

transaction_ID	4980
book_ID	67890

## Library Management System

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[System\\_Allocation](#) [Library\\_Staff\\_Working\\_Hours](#)

Show  entries

Search:

transaction_ID	book_ID	Delete
4232	45678	X
4238	12345	X
4278	34567	X
4898	23456	X
4980	67890	X

Showing 1 to 5 of 5 entries

Previous  Next

**Input Values to be Inserted**

transaction_ID	
book_ID	

The screenshot shows the Oracle SQL Developer interface. The left sidebar displays the schema tree with the 'Book\_Issue' table selected. The main area shows the 'Result Grid' with the following data:

	transaction_ID	book_ID
>	4238	12345
	4898	23456
	4278	34567
	4232	45678
	4980	67890
	NULL	NULL

The right sidebar contains the 'Execution Plan' tab, which is currently disabled. A message in the top right corner states: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

Object Info panel: Table: Book\_Issue

Columns:

transaction_ID	int PK
book_ID	int

Action Output table:

Time	Action	Response	Duration / Fetch Time
0	19:36:13	SELECT * FROM assignment_6.Book_Issue LIMIT 0, 1000	4 row(s) returned 0.00039 sec / 0.000...
7	19:36:13	SELECT * FROM assignment_6.Book_Issue LIMIT 0, 1000	5 row(s) returned 0.00039 sec / 0.000...

Query Completed

## Updating Entry in Library\_Systems Relation

## Library Management System

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[System\\_Allocation](#) [Library\\_Staff\\_Working\\_Hours](#)

Show  entries

Search:

system_ID	system_specs	Delete
1011	OS: Windows, NVIDIA GPU	X
1023	'IDIA GPU 256 GB RAM	X
1024		X
1035	OS: Windows, NVIDIA GPU	X

Showing 1 to 4 of 4 entries

Previous  Next

Input Values to be Inserted

system_ID	<input type="text"/>
system_specs	<input type="text"/>
<input type="button" value="Add"/>	

## Library Management System

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[System\\_Allocation](#) [Library\\_Staff\\_Working\\_Hours](#)

Show  entries

Search:

system_ID	system_specs	Delete
1011	OS: Windows, NVIDIA GPU	X
1023	OS: Windows, NO GPU	X
1024	OS: MacOS, TPU	X
1035	OS: Windows, NVIDIA GPU 256 GB RAM	X

Showing 1 to 4 of 4 entries

Previous  Next

Input Values to be Inserted

system_ID	<input type="text"/>
system_specs	<input type="text"/>
<input type="button" value="Add"/>	

MySQLWorkbench File Edit View Query Database Server Tools Scripting Help

Local instance 3306 MySQL Workbench

Administration Schemas Query 4 Library\_Systems

Result Grid Filter Rows: Search Edit: Export/Import:

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

SCHEMAS

system\_ID system\_specs

1011 OS: Windows, NVIDIA GPU  
1023 OS: Windows, NO GPU  
1024 OS: MacOS, TPU  
1035 OS: Windows, NVIDIA GPU 256 GB RAM

NULL NULL

Object Info Session

Table: Library\_Systems

Columns:

system_ID	int PK
system_specs	text

Action Output

Time	Action	Response	Duration / Fetch Time
19:37:45	SELECT * FROM assignment_6.Library_Systems LIMIT 0, 1000	4 row(s) returned	0.00039 sec / 0.000...
8	19:37:45	SELECT * FROM assignment_6.Library_Systems LIMIT 0, 1000	0.00039 sec / 0.000...

Query Completed

The screenshot shows the MySQL Workbench interface with the 'Library\_Systems' table selected. The table contains four rows of data. The 'system\_specs' column includes entries like 'OS: Windows, NVIDIA GPU', 'OS: Windows, NO GPU', 'OS: MacOS, TPU', and 'OS: Windows, NVIDIA GPU 256 GB RAM'. Below the table, the 'Execution Plan' pane displays the results of a query execution, showing a single row with a duration of 0.00039 seconds and a fetch time of 0.000 seconds. The status bar at the bottom indicates 'Query Completed'.

## Deleting Entry in Library\_Systems Relation

## Library Management System

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**System\_Allocation** [Library\\_Staff\\_Working\\_Hours](#)

Show  entries

Search:

user_ID	system_ID	Delete
123	1035	X
561	1011	X
603	1023	X
604	1024	X

Showing 1 to 4 of 4 entries

[Previous](#) [1](#) [Next](#)

### Input Values to be Inserted

user\_ID   
 system\_ID

[Add](#)

## Library Management System

[Users](#) [Users\\_Phone](#) [Student](#) [Faculty](#) [Staff](#) [Library\\_Staff](#) [Other\\_Staff](#) [Library\\_Systems](#) [Books](#) [Books\\_Purchase](#) [Publishers](#) [Publishers\\_Phone](#)  
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**System\_Allocation** [Library\\_Staff\\_Working\\_Hours](#)

Show  entries

Search:

user_ID	system_ID	Delete
123	1035	X
561	1011	X
604	1024	X

Showing 1 to 3 of 3 entries

[Previous](#) [1](#) [Next](#)

### Input Values to be Inserted

user\_ID   
 system\_ID

[Add](#)

The screenshot shows the MySQL Workbench interface. In the top navigation bar, the 'Query' tab is selected. Below the toolbar, there's a 'Result Grid' section with a table titled 'System\_Allocation'. The table has two columns: 'user\_ID' and 'system\_ID'. The data shows three rows: (561, 1011), (604, 1024), and (123, 1035). The right side of the interface features a vertical sidebar with various tools and help sections, including 'Result Grid', 'Form Editor', 'Field Types', 'Query Stats', and 'Execution Plan'. A note in the sidebar states: 'Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.' At the bottom left, it says 'Query Completed'.

## Error due to Foreign Key Constraint in Users Relation

The screenshot shows a MySQL database browser interface. It displays a table named 'Users' with the following columns: user\_id, user\_name, and Delete. The table contains 18 rows of data. The 'Delete' column contains several red 'X' marks. At the bottom of the table, it says 'Showing 1 to 18 of 18 entries'. Below the table, a URL in the address bar reads '127.0.0.1:5000/delete/Users?Users\_user\_id=101&Users\_user\_name=Kim&'. The browser status bar at the bottom indicates 'Wed 30 Mar 7:12:28 PM'.

user_id	user_name	Delete
101	Kim	X
102	Bob	X
103	Siya	X
123	Snape	X
200	Rachel	X
301	Sam	X
302	Sam	X
401	Gita	X
561	Monica	X
601	Harry	X
602	Ginny	X
603	Hermoine	X
604	Ron	X
605	Neville	X
721	Chandler	X
723	Lily	X
811	Ross	X
922	Phoebe	X

The screenshot shows a Chrome browser window. The address bar contains the URL '127.0.0.1:5000/delete/Users?Users\_user\_id=101&Users\_user\_name=Kim&'. The browser status bar at the bottom indicates 'Wed 30 Mar 7:12:28 PM'. A message in the browser window states: 'There was an issue adding the entry:(1451, 'Cannot delete or update a parent row: a foreign key constraint fails (`assignment\_6`.`user\_issue`, CONSTRAINT `user\_ID\_user` FOREIGN KEY (`user\_ID`) REFERENCES `users` (`user\_ID`)))'.

## Error due to Duplicate Primary Key in Books Relation

Authors Genres Location Transaction Penalties Purchase Book\_Issue User\_Issue Strike Book\_Pub Book\_Auth Book\_Genre Book\_Location  
System\_Allocation Library\_Staff\_Working\_Hours

Show 10 entries

Search:

book_ID	book_name	num_pages	availability	Delete
12345	Science Marvels	560	True	X
23456	Archaeology	245	False	X
34567	Astro Physics	500	True	X
45670	Compilers	679	True	X
45678	Panchatantra	200	True	X
56789	Computer Organisation and Architecture	1200	True	X
67890	Sherlock Holmes	820	True	X

Showing 1 to 7 of 7 entries

Previous 1 Next

Input Values to be Inserted

book_ID	67890
book_name	Databases
num_pages	623
availability	True

Add

Chrome File Edit View History Bookmarks Profiles Tab Window Help

127.0.0.1:5000/add/Books

← → ⌂ ⓘ 127.0.0.1:5000/add/Books

There was an issue adding the entry: (1062, "Duplicate entry '67890' for key 'books.PRIMARY'"")