

# CS 313

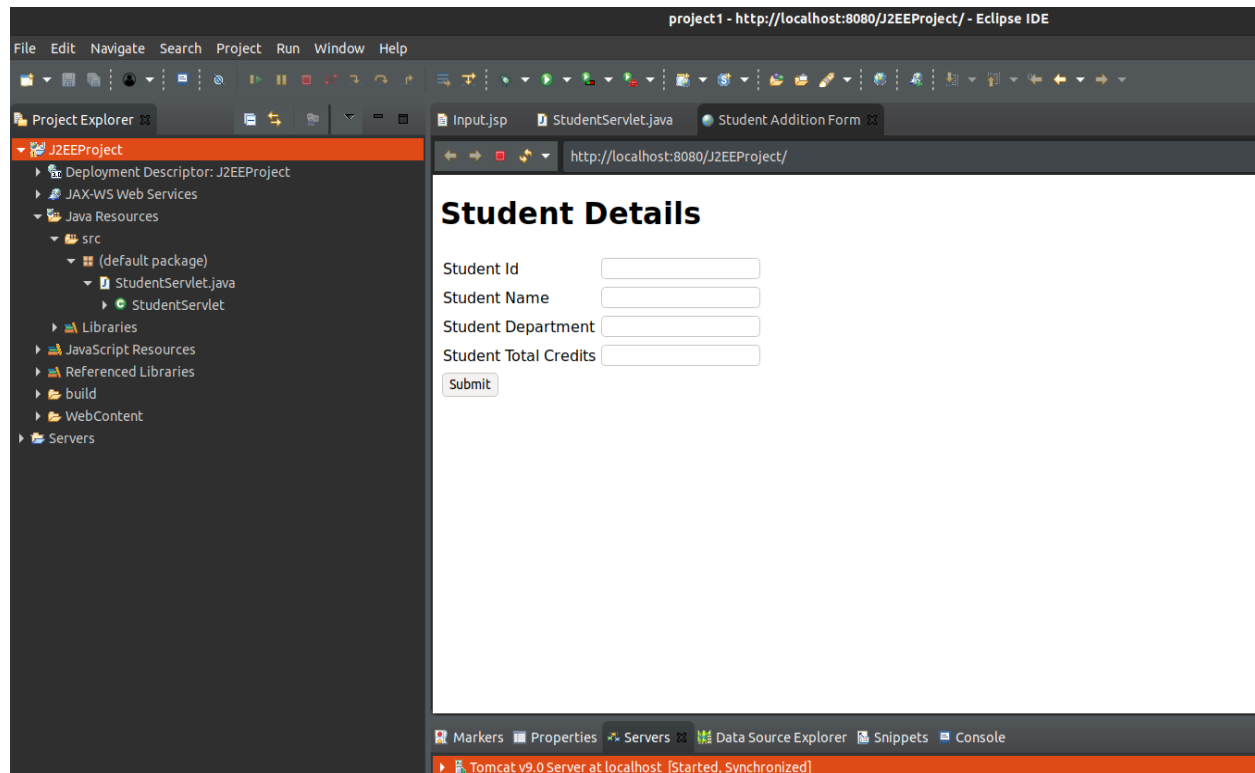
## Databases and Information Systems Lab

### Project 1

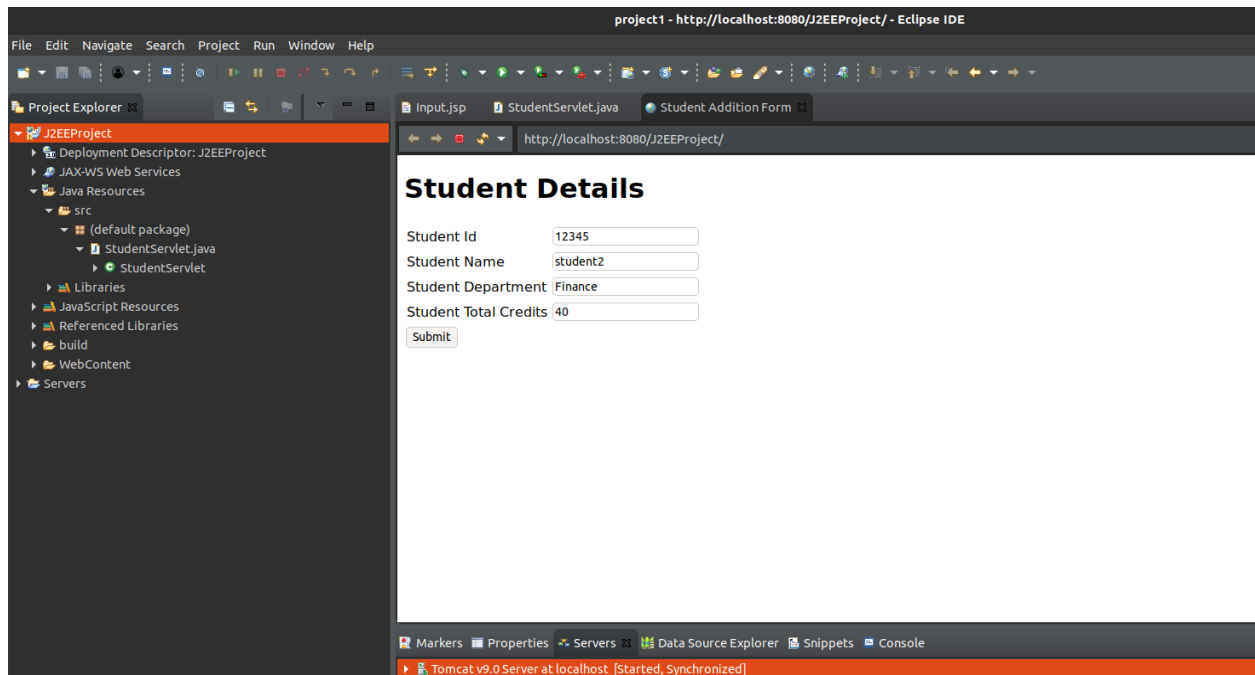
Pranav Kanire - 190010033  
October 14, 2021

# Part A

I imported the given project and resolved all the issues.  
Finally, I got the below result:



Before Submit is pressed:

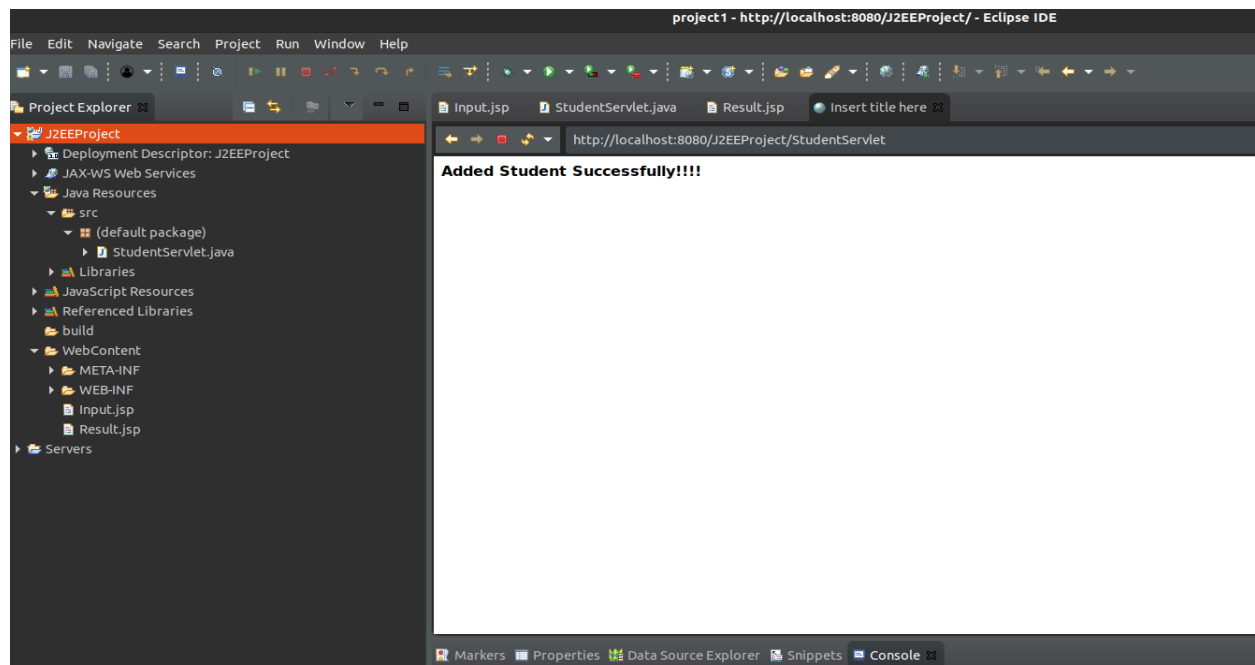


'student' table from 'university' database:

```
mysql> select * from student;
+-----+-----+-----+-----+
| ID    | name  | dept_name | tot_cred |
+-----+-----+-----+-----+
| 00000 | New   | Biology   | 6        |
| 00128 | Zhang | Comp. Sci. | 102      |
| 19991 | Brandt | History   | 80       |
| 23121 | Chavez | Finance   | 110      |
| 23242 | asfd  | Finance   | 23       |
| 23423 | dcw   | Biology   | 3        |
| 32452 | wef   | Biology   | 43       |
| 3453  | asdf  | Finance   | 2        |
| 44553 | Peltier | Physics   | 56       |
| 45678 | Levy  | Physics   | 46       |
| 54321 | Williams | Comp. Sci. | 54       |
| 55739 | Sanchez | Music     | 38       |
| 69    | star  | Physics   | 10       |
| 70557 | Snow  | Physics   | 0        |
| 76543 | Brown | Comp. Sci. | 58       |
| 76653 | Aoi   | Elec. Eng. | 60       |
| 96    | star  | Biology   | 1        |
| 98765 | Bourikas | Elec. Eng. | 98       |
| 98988 | Tanaka | Biology   | 120      |
+-----+-----+-----+-----+
19 rows in set (0.00 sec)

mysql> 
```

After submit:



'student' table from 'university' database:

```
mysql> select * from student;
+-----+-----+-----+-----+
| ID    | name    | dept_name | tot_cred |
+-----+-----+-----+-----+
| 00000 | New     | Biology   | 6         |
| 00128 | Zhang   | Comp. Sci. | 102        |
| 12345 | student2 | Finance   | 40         |
| 19991 | Brandt  | History   | 80         |
| 23121 | Chavez  | Finance   | 110        |
| 23242 | asfd    | Finance   | 23         |
| 23423 | dcw     | Biology   | 3          |
| 32452 | wef     | Biology   | 43         |
| 3453  | asdf    | Finance   | 2          |
| 44553 | Peltier | Physics   | 56         |
| 45678 | Levy    | Physics   | 46         |
| 54321 | Williams | Comp. Sci. | 54         |
| 55739 | Sanchez | Music     | 38         |
| 69    | star    | Physics   | 10         |
| 70557 | Snow    | Physics   | 0          |
| 76543 | Brown   | Comp. Sci. | 58         |
| 76653 | Aoi     | Elec. Eng. | 60         |
| 96    | star    | Biology   | 1          |
| 98765 | Bourikas | Elec. Eng. | 98         |
| 98988 | Tanaka  | Biology   | 120        |
+-----+-----+-----+-----+
20 rows in set (0.00 sec)

mysql> 
```

# Part B

## TASK 1

Create and use Database:

```
mysql> create database Library;  
Query OK, 1 row affected (0.02 sec)  
  
mysql> use Library;  
Database changed
```

Create Tables:

(task1.sql file is attached separately.)

```
mysql> source Documents/task1.sql;  
Query OK, 0 rows affected (0.04 sec)  
  
Query OK, 0 rows affected (0.02 sec)  
  
Query OK, 0 rows affected (0.02 sec)
```

## TASK 2

Insert data into each table:

(task2.sql file is attached separately.)

```
mysql> source Documents/task2.sql;
Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.01 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.01 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.01 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.01 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.01 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

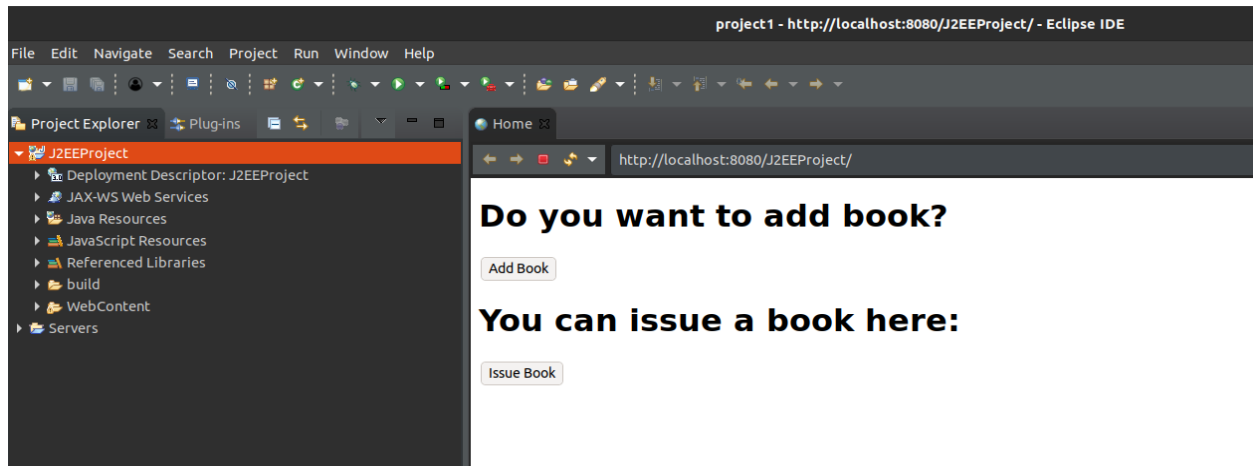
Query OK, 1 row affected (0.01 sec)

Query OK, 1 row affected (0.00 sec)

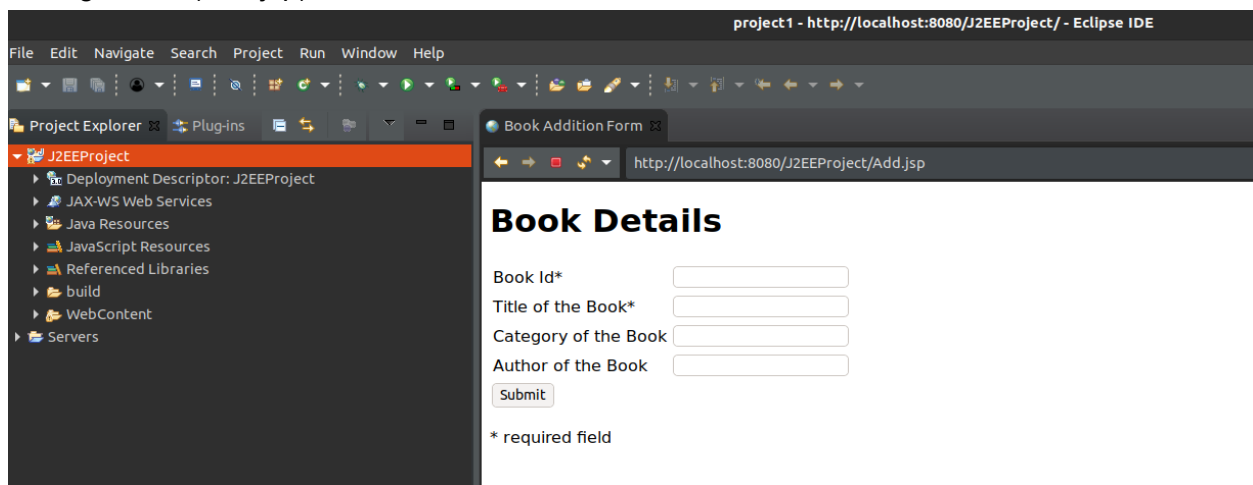
mysql> █
```

## TASK 3

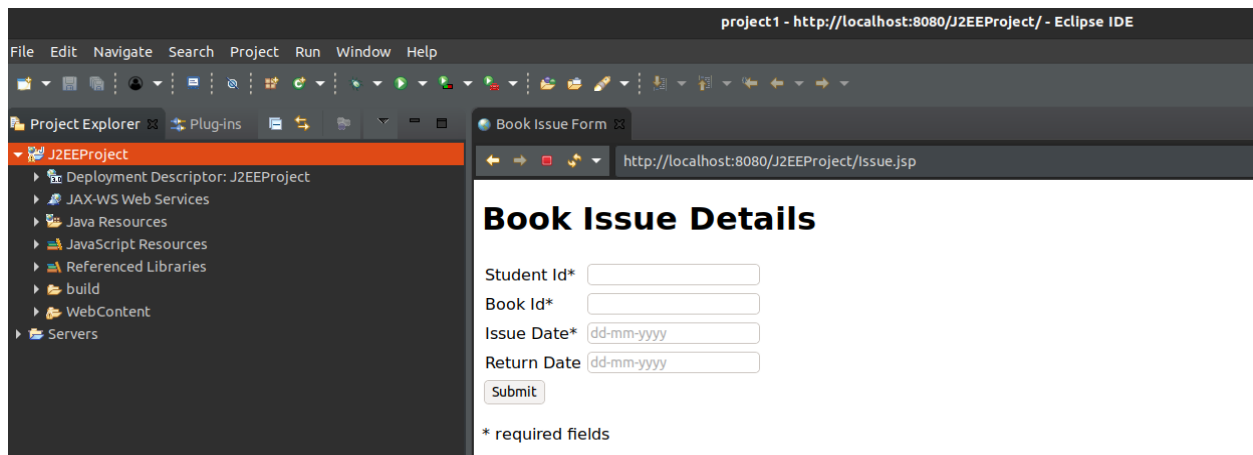
Home Page(Home.jsp):



Adding a book(Add.jsp):

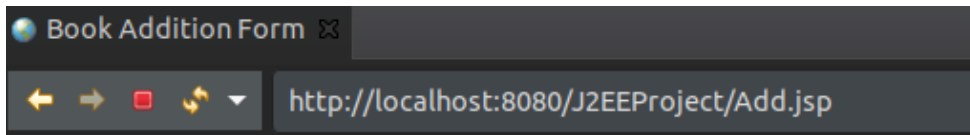


Issue a book(Issue.jsp):



## Add book:

Before submitting (Add.jsp):



## Book Details

Book Id*	<input type="text" value="6"/>
Title of the Book*	<input type="text" value="English"/>
Category of the Book	<input type="text" value="Literature"/>
Author of the Book	<input type="text" value="Me"/>
<input type="button" value="Submit"/>	

\* required field

Table 'book' before submit:

```
mysql> select * from book;
+-----+-----+-----+-----+
| book_id | title       | category | author |
+-----+-----+-----+-----+
| 1       | aerodynamics | mmae     | pranav |
| 2       | computer     | cse      | genius |
| 3       | history      | hs       | narad  |
| 4       | aerodynamics | mmae     | pilot  |
| 5       | circuits     | ee       | binary |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> 
```



After Submit (AddResult.jsp):

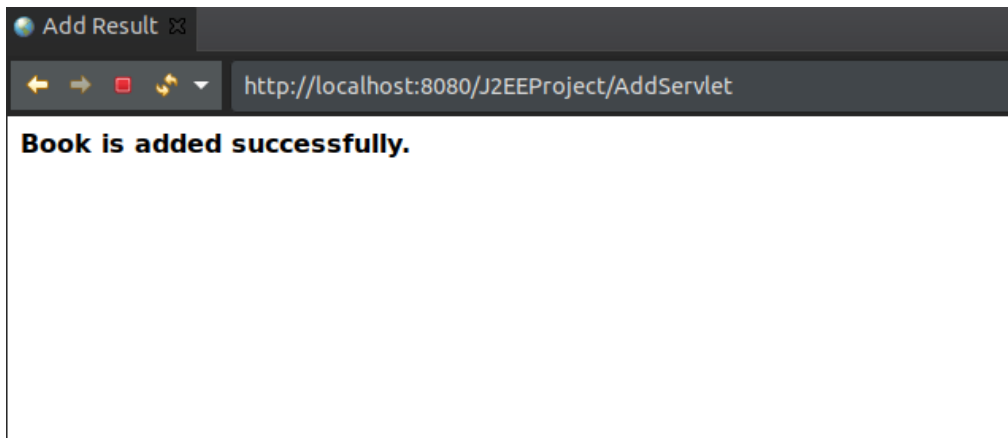
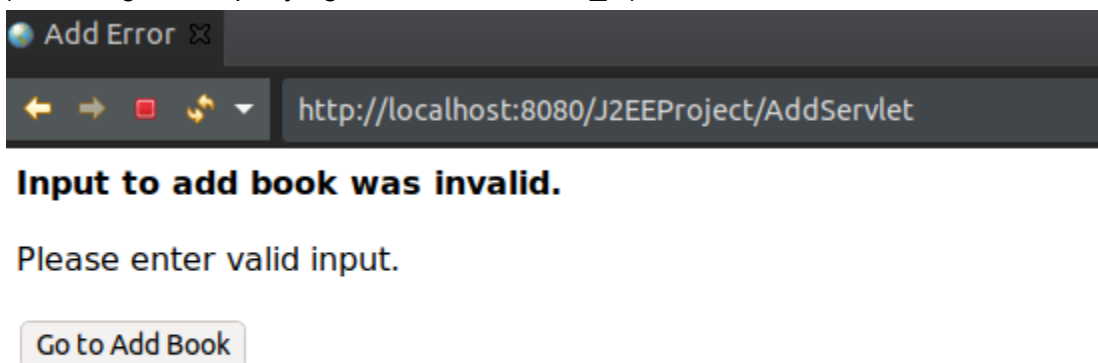


Table 'book' after submit:

```
mysql> select * from book;
+-----+-----+-----+-----+
| book_id | title       | category | author |
+-----+-----+-----+-----+
| 1       | aerodynamics | mmae     | pranav |
| 2       | computer    | cse      | genius |
| 3       | history     | hs       | narad  |
| 4       | aerodynamics | mmae     | pilot  |
| 5       | circuits    | ee       | binary |
| 6       | English     | Literature | Me     |
+-----+-----+-----+-----+
6 rows in set (0.00 sec)

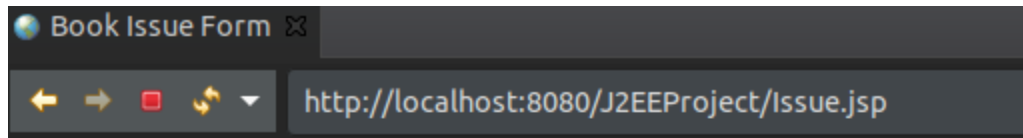
mysql> 
```

Entering Invalid query:  
(executing same query again with same book\_id)



## Issue Book

Before submitting (Issue.jsp):



## Book Issue Details

Student Id\*

Book Id\*

Issue Date\*

Return Date

\* required fields

Table 'issue' before submit:

```
mysql> select * from issue;
+-----+-----+-----+-----+
| student_id | book_id | issue_date | return_date |
+-----+-----+-----+-----+
| 101 | 1 | 19-4-2021 | 14-8-2021 |
| 101 | 1 | 20-8-2020 | 20-9-2020 |
| 101 | 3 | 26-7-2020 | 23-2-2021 |
| 102 | 1 | 05-12-2020 | 15-2-2021 |
| 102 | 2 | 10-6-2020 | 20-9-2020 |
| 103 | 3 | 30-1-2020 | 10-5-2020 |
| 104 | 4 | 24-3-2020 | 27-7-2020 |
| 104 | 5 | 15-8-2020 | 06-11-2020 |
| 105 | 4 | 17-1-2021 | 18-4-2021 |
| 105 | 5 | 23-9-2020 | 25-11-2020 |
+-----+-----+-----+-----+
10 rows in set (0.00 sec)

mysql> 
```

After Submit (IssueResult.jsp):

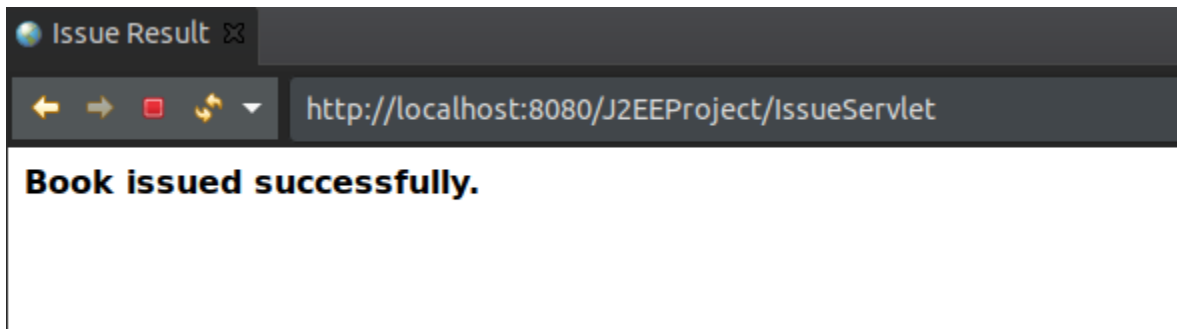


Table 'issue' after submit:

```
mysql> select * from issue;
+-----+-----+-----+-----+
| student_id | book_id | issue_date | return_date |
+-----+-----+-----+-----+
| 101 | 1 | 19-4-2021 | 14-8-2021 |
| 101 | 1 | 20-8-2020 | 20-9-2020 |
| 101 | 3 | 26-7-2020 | 23-2-2021 |
| 102 | 1 | 05-12-2020 | 15-2-2021 |
| 102 | 2 | 10-6-2020 | 20-9-2020 |
| 103 | 3 | 12-03-2021 |  |
| 103 | 3 | 30-1-2020 | 10-5-2020 |
| 104 | 4 | 24-3-2020 | 27-7-2020 |
| 104 | 5 | 15-8-2020 | 06-11-2020 |
| 105 | 4 | 17-1-2021 | 18-4-2021 |
| 105 | 5 | 23-9-2020 | 25-11-2020 |
+-----+-----+-----+-----+
11 rows in set (0.00 sec)

mysql> 
```

Entering Invalid query:  
(executing query with same student\_id that doesn't exist)

