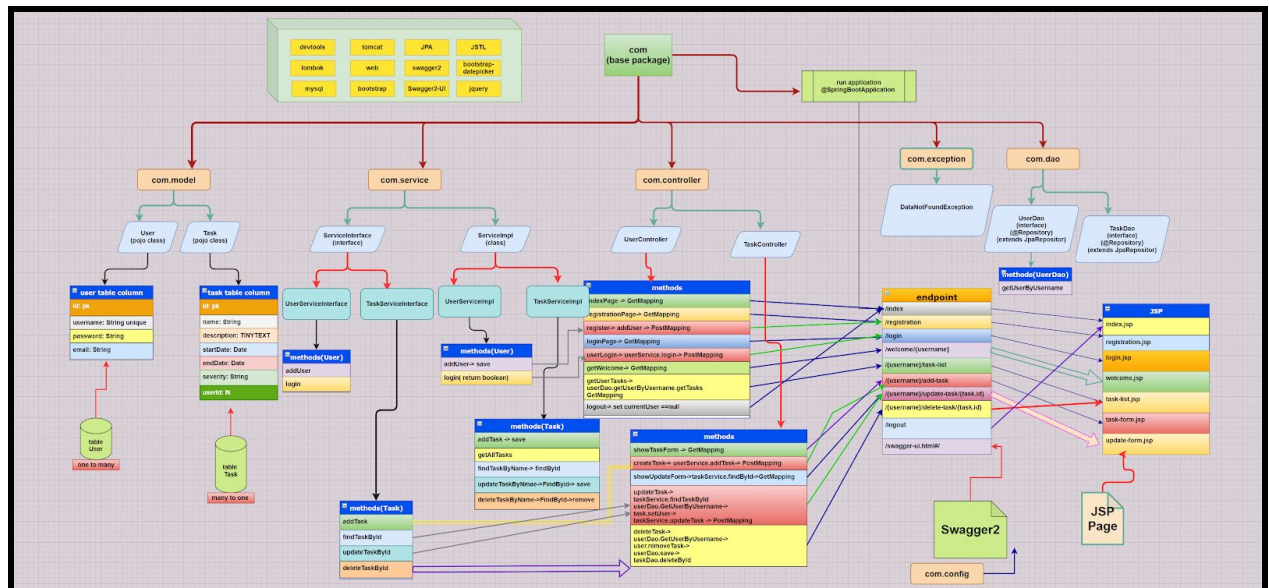# Task Manager App-Phase 3 End Project

## Flow chart



## Steps:

- **For the project, because the user has many tasks, so it is many to one relationship on task model, one to many relationship for User model. Two tables will be in the database.**
- **Both sides have a Dao, controller, service , model to implement business logic.**
- **Using @ControllerAdvice to create GloablExceotionHandler to handle exceptions.**
- **Using swagger2 for API document and UI**
- **Using BootStrip for styling.**

# Screenshot for steps:

## Step 1: index page offer user two options:

- **As a new user, I can sign up**
- **As a returning user, I can login with username and password**
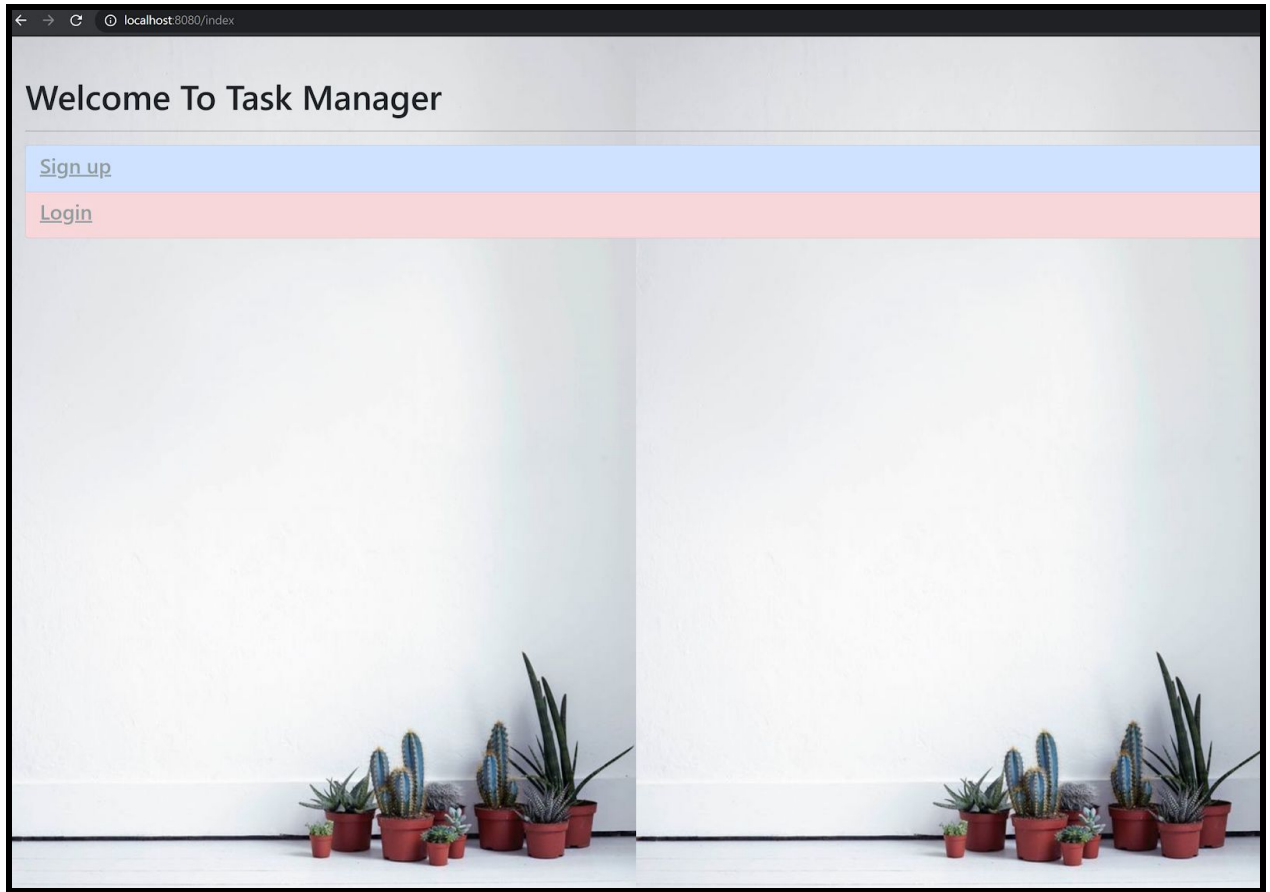
**Step 2: click Sign up go to /registration, will display a registration form and fill it in, once submit, will go to /login. And database data will persist.**

```
mysql> select * from users;
+----+------------------------------+----------+--------------------+
| id | email                        | password | username           |
+----+------------------------------+----------+--------------------+
|  1 | SpringbootCoder12021@gmail.com | 123      | SpringbootCoder2021 |
+----+------------------------------+----------+--------------------+
1 row in set (0.00 sec)

mysql>
```

## Step 3 login, then be directed to /welcome/{username}

- **Check all my tasks**
- **Check Api Documentation (swagger 2)**
- **Go back to /index**
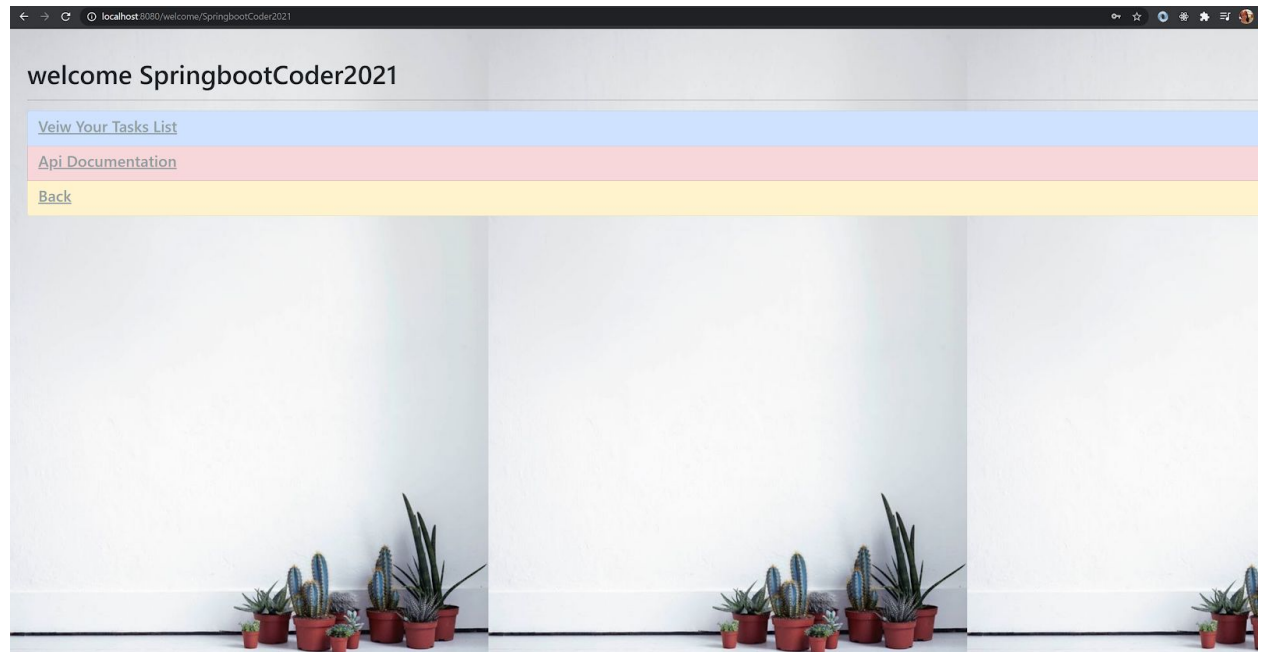
**Step 4 : Check tasks list, will go to /{username}/task-list, since I am a new user, there is no any task yet, so let's add some tasks.**
**Click Add A New Task, go to /{username}/add-task**
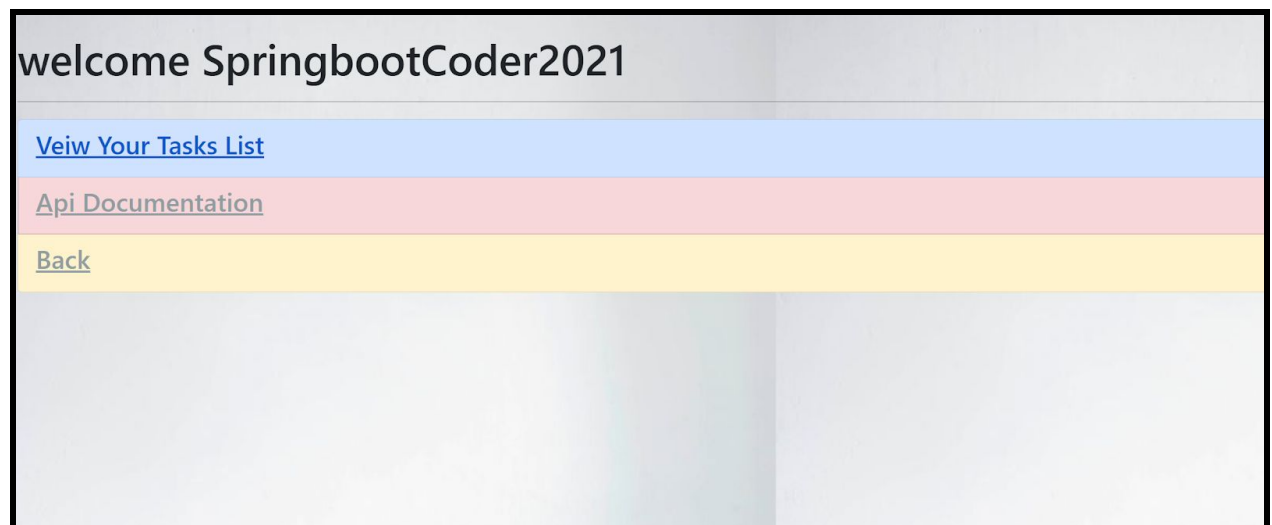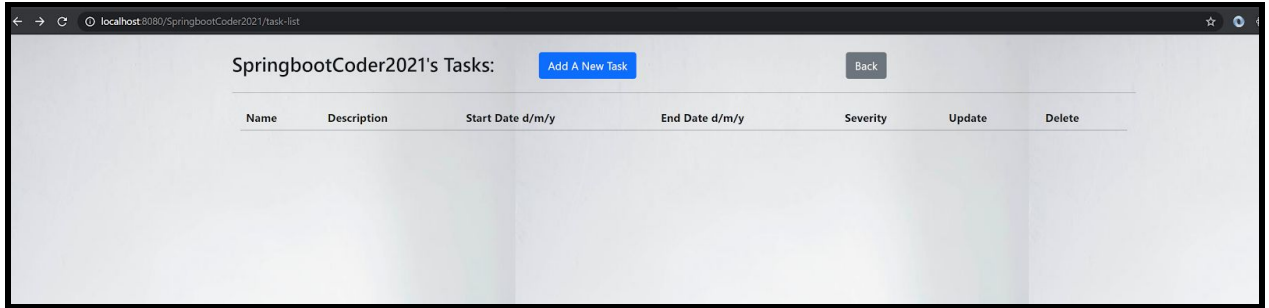
**Step 5: fill out the form, name, description, start date , end date( day picker), severity(drop down) , then submit.**

**Create A New Task**

Name

Water the plants

Description

Green Action, save the earth

Start Date 2021-01-19

End Date

| Su | Mo | Tu | We | Th | Fr | Sa |
|----|----|----|----|----|----|----|
| | | | | | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | | | | | | |

January 2021

Severity

High

Submit

Back



**Create A New Task**

Name

Water the plants

Description

Green Action, save the earth

Start Date 2021-01-19

End Date 2021-01-31

Severity

High

High

Medium

Low

Back

**Step 6: Once submitted, will go back to /{username}/task-list, and the added task will be displaying. Database data persisted.**



**Step 7: Let's add a few more tasks;**

SpringbootCoder2021's Tasks: [Add A New Task] [Back]

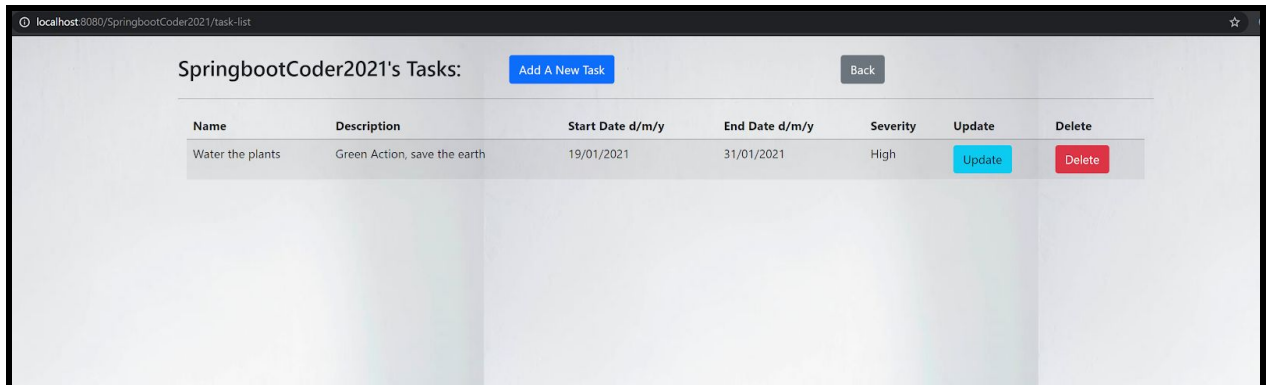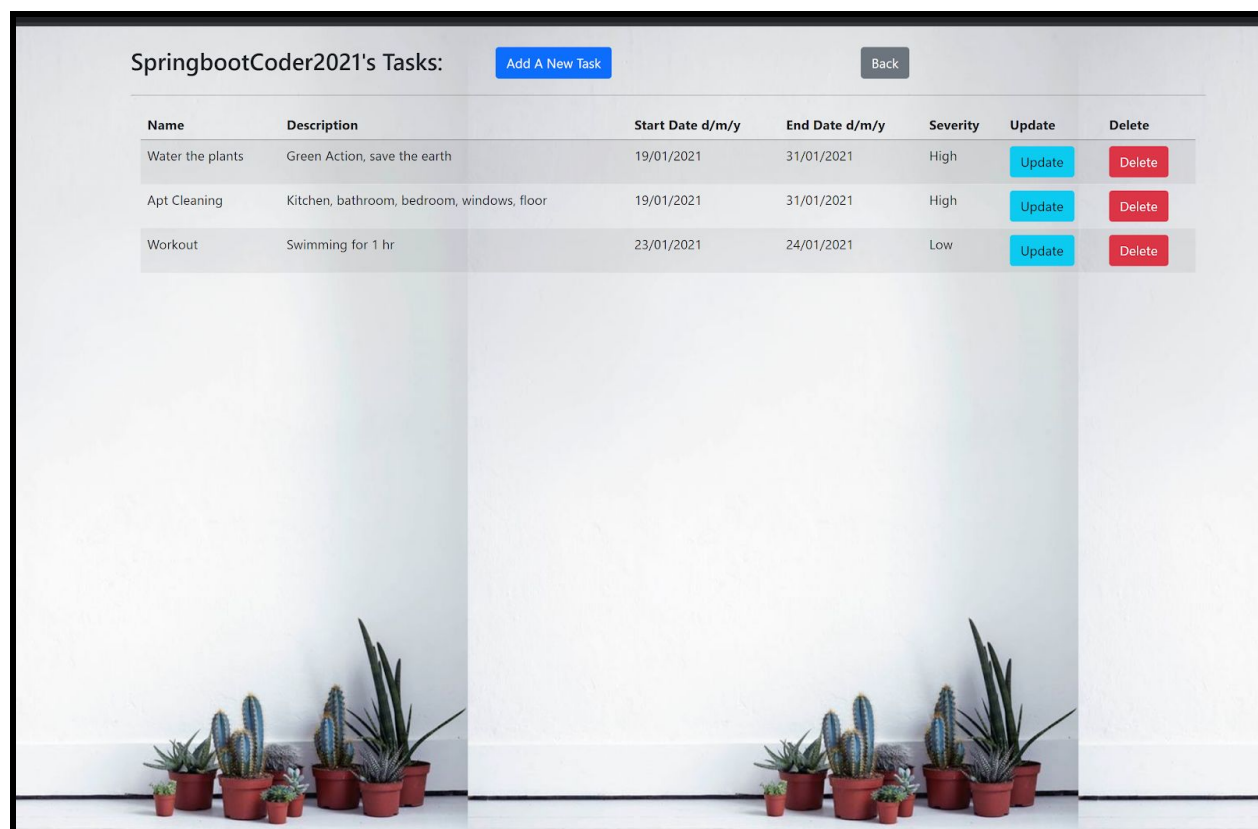| Name | Description | Start Date d/m/y | End Date d/m/y | Severity | Update | Delete |
|------|-------------|------------------|----------------|----------|--------|--------|
| Water the plants | Green Action, save the earth | 19/01/2021 | 31/01/2021 | High | Update | Delete |
| Apt Cleaning | Kitchen, bathroom, bedroom, windows, floor | 19/01/2021 | 31/01/2021 | High | Update | Delete |
| Workout | Swimming for 1 hr | 23/01/2021 | 24/01/2021 | Low | Update | Delete |

```
mysql> select * from tasks;
+----+------------------------------+------------+-----------------+----------+------------+---------+
| id | description                  | end_date   | name            | severity | start_date | user_id |
+----+------------------------------+------------+-----------------+----------+------------+---------+
|  1 | Green Action, save the earth | 2021-01-31 | Water the plants | High     | 2021-01-19 |       1 |
+----+------------------------------+------------+-----------------+----------+------------+---------+
1 row in set (0.00 sec)

mysql> select * from tasks;
+----+-------------------------------------------+------------+-----------------+----------+------------+---------+
| id | description                               | end_date   | name            | severity | start_date | user_id |
+----+-------------------------------------------+------------+-----------------+----------+------------+---------+
|  1 | Green Action, save the earth              | 2021-01-31 | Water the plants | High     | 2021-01-19 |       1 |
|  2 | Swimming for 1 hr                         | 2021-01-24 | Workout         | Low      | 2021-01-23 |       1 |
|  3 | Kitchen, bathroom, bedroom, windows, floor | 2021-01-31 | Apt Cleaning    | High     | 2021-01-19 |       1 |
+----+-------------------------------------------+------------+-----------------+----------+------------+---------+
3 rows in set (0.00 sec)
```

**Step 4: Let's update workout information. Click update, will go to /{username}/update-task/{task.id}, the original data will be displayed and we can modify it . Once submitted, will go back to the task list and display the updated tasks. Data will be persisted in the database.**

## SpringbootCoder2021's Tasks:

Add A New Task        Back

| Name | Description | Start Date d/m/y | End Date d/m/y | Severity | Update | Delete |
|------|-------------|------------------|----------------|----------|--------|--------|
| Water the plants | Green Action, save the earth | 19/01/2021 | 31/01/2021 | High | Update | Delete |
| Apt Cleaning | Kitchen, bathroom, bedroom, windows, floor | 19/01/2021 | 31/01/2021 | High | Update | Delete |
| Workout | Swimming for 30mins, biking for 30 mins | 23/01/2021 | 24/01/2021 | Medium | Update | Delete |

```
mysql> select * from tasks;
+----+-------------------------------------------+------------+----------------+----------+------------+---------+
| id | description                               | end_date   | name           | severity | start_date | user_id |
+----+-------------------------------------------+------------+----------------+----------+------------+---------+
|  1 | Green Action, save the earth              | 2021-01-31 | Water the plants | High   | 2021-01-19 |       1 |
|  2 | Swimming for 1 hr                         | 2021-01-24 | Workout        | Low      | 2021-01-23 |       1 |
|  3 | Kitchen, bathroom, bedroom, windows, floor | 2021-01-31 | Apt Cleaning  | High     | 2021-01-19 |       1 |
+----+-------------------------------------------+------------+----------------+----------+------------+---------+
3 rows in set (0.00 sec)

mysql> select * from tasks;
+----+-------------------------------------------+------------+----------------+----------+------------+---------+
| id | description                               | end_date   | name           | severity | start_date | user_id |
+----+-------------------------------------------+------------+----------------+----------+------------+---------+
|  1 | Green Action, save the earth              | 2021-01-31 | Water the plants | High   | 2021-01-19 |       1 |
|  2 | Swimming for 30mins, biking for 30 mins   | 2021-01-24 | Workout        | Medium   | 2021-01-23 |       1 |
|  3 | Kitchen, bathroom, bedroom, windows, floor | 2021-01-31 | Apt Cleaning  | High     | 2021-01-19 |       1 |
+----+-------------------------------------------+------------+----------------+----------+------------+---------+
3 rows in set (0.00 sec)

mysql>
```

**Step 5, let's delete the <Apt Cleaning> task, click delete, then the task will be deleted.  Data will be deleted in the database as well.**

## SpringbootCoder2021's Tasks:

Add A New Task        Back

| Name | Description | Start Date d/m/y | End Date d/m/y | Severity | Update | Delete |
|------|-------------|------------------|----------------|----------|--------|--------|
| Water the plants | Green Action, save the earth | 19/01/2021 | 31/01/2021 | High | Update | Delete |
| Workout | Swimming for 30mins, biking for 30 mins | 23/01/2021 | 24/01/2021 | Medium | Update | Delete |

```
mysql> select * from tasks;
+----+-----------------------------------------------+------------+-----------------+----------+------------+---------+
| id | description                                   | end_date   | name            | severity | start_date | user_id |
+----+-----------------------------------------------+------------+-----------------+----------+------------+---------+
|  1 | Green Action, save the earth                  | 2021-01-31 | Water the plants | High    | 2021-01-19 |       1 |
|  2 | Swimming for 30mins, biking for 30 mins       | 2021-01-24 | Workout         | Medium   | 2021-01-23 |       1 |
|  3 | Kitchen, bathroom, bedroom, windows, floor    | 2021-01-31 | Apt Cleaning    | High     | 2021-01-19 |       1 |
+----+-----------------------------------------------+------------+-----------------+----------+------------+---------+
3 rows in set (0.00 sec)

mysql> select * from tasks;
+----+-----------------------------------------------+------------+-----------------+----------+------------+---------+
| id | description                                   | end_date   | name            | severity | start_date | user_id |
+----+-----------------------------------------------+------------+-----------------+----------+------------+---------+
|  1 | Green Action, save the earth                  | 2021-01-31 | Water the plants | High    | 2021-01-19 |       1 |
|  2 | Swimming for 30mins, biking for 30 mins       | 2021-01-24 | Workout         | Medium   | 2021-01-23 |       1 |
+----+-----------------------------------------------+------------+-----------------+----------+------------+---------+
2 rows in set (0.00 sec)

mysql>
```

**To check Swagger 2, click Api Documentation, will go the page**

localhost:8080/welcome/SpringbootCoder2021

# welcome SpringbootCoder2021

Veiw Your Tasks List

Api Documentation

Back

localhost:8080/swagger-ui.html#/user-controller

⟨⟩ swagger    default (/v2/api-docs) ▾   api_key    Explore

## Api Documentation

Api Documentation

Apache 2.0

**task-controller : Task Controller**    Show/Hide | List Operations | Expand Operations

| GET | /{username}/add-task | showTaskForm |
| POST | /{username}/add-task | createTask |
| GET | /{username}/delete-task/{task.id} | deleteTask |
| GET | /{username}/update-task/{task.id} | showUpdateForm |
| POST | /{username}/update-task/{task.id} | updateTask |

**user-controller : User Controller**    Show/Hide | List Operations | Expand Operations

| GET | /index | indexPage |
| GET | /login | loginPage |
| POST | /login | userLogin |
| GET | /registration | registrationPage |
| POST | /registration | register |
| GET | /welcome/{username} | getWelcome |
| GET | /{username}/task-list | getTask |

[ BASE URL: / , API VERSION: 1.0 ]

# Let's register another user



## Registration

Email address

viv@gmail.com

User Name

chefviv

Password

...

Sign up

```
mysql> select * from users;
+----+---------------------------------+----------+--------------------+
| id | email                           | password | username           |
+----+---------------------------------+----------+--------------------+
|  1 | SpringbootCoder12021@gmail.com  | 123      | SpringbootCoder2021 |
|  2 | viv@gmail.com                   | 123      | chefviv            |
+----+---------------------------------+----------+--------------------+
2 rows in set (0.00 sec)
```

## Login

User Name

chefviv

Password

...

Login

Back

chefviv's Tasks:     Add A New Task     Back

| Name | Description | Start Date d/m/y | End Date d/m/y | Severity | Update | Delete |
|------|-------------|------------------|----------------|----------|--------|--------|

# Let's register another user

## Create A New Task

Name

Java Project

Description

Create a mini task manager app by using springboot , as a user, I can the create, update, delete tasks.

Start Date  2021-01-18

End Date  2021-01-18

Severity

High

[Submit]

[Back]

---

**chefviv's Tasks:**   [Add A New Task]   [Back]

| Name | Description | Start Date d/m/y | End Date d/m/y | Severity | Update | Delete |
|------|-------------|------------------|----------------|----------|--------|--------|
| Java Project | Create a mini task manager app by using springboot , as a user, I can the create, update, delete tasks. | 18/01/2021 | 18/01/2021 | High | Update | Delete |

**As we can see, because tasks and user are many to one relationship, so inside the task table, there is user_id column as join column to associate both side.**

```
mysql> select * from tasks;
+----+-------------------------------------------------------------------------------------------+------------+----------------+----------+------------+---------+
| id | description                                                                               | end_date   | name           | severity | start_date | user_id |
+----+-------------------------------------------------------------------------------------------+------------+----------------+----------+------------+---------+
|  1 | Green Action, save the earth                                                              | 2021-01-31 | Water the plants | High   | 2021-01-19 |       1 |
|  2 | Swimming for 30mins, biking for 30 mins                                                   | 2021-01-24 | Workout        | Medium   | 2021-01-23 |       1 |
|  4 | Create a mini task manager app by using springboot , as a user, I can the create, update, delete tasks. | 2021-01-18 | Java Project | High | 2021-01-18 |       2 |
+----+-------------------------------------------------------------------------------------------+------------+----------------+----------+------------+---------+
3 rows in set (0.00 sec)

mysql> _
```

**Github link: https://github.com/chefvivica/task-manager-app-phase3-end-project**