Spring Fundamentals Exam

LikeBook Application

Exam for the ["Spring Fundamentals" course @ SoftUni](about.softuni.bg).

With its easy-to-use interface and detail-rich profiles, **LikeBook** App makes it clear why it's one of the most enduring social network apps. This is the service to try if you're looking for a connection with friends and new communities. There are several requirements you must follow in the implementation:

**An example skeleton is included in the resources, which can be used as desired.*

1. Database Requirements

The **Database** of the **LikeBook** application needs to support **3 entities**:

User

- Has an **Id – "UUID-String" or Long**
- Has a **Username (unique, not null)**
  - Username length must be between 3 and 20 characters (inclusive of 3 and 20).
- Has a **Password (not null)**
  - Password length must be between 3 and 20 characters (inclusive of 3 and 20).
- Has an **Email (unique, not null)**
  - Must contain '@'.

Post

- Has an **Id – "UUID-String" or Long**
- Has a **Content (not null)**
  - Content length must be between 2 and 150 characters (inclusive of 2 and 150).
- Has a **User (not null)**
  - The creator of the post. One **post** can have only one **user** and one **user** may have many **posts**.
- Has a **User Likes**
  - The **user likes** contains users. One **user** may like many **posts** and one **post** can be **liked** by many **users**.
- Has a **Mood (not null)**
  - One post **has one** mood and one mood **can have many** posts.

Mood

- Has an **Id – "UUID-String" or Long**
- Has a **Mood name (unique, not null)**
  - an option between (**Happy**, **Sad** and **Inspired**)
- Has a **Description (optional)**

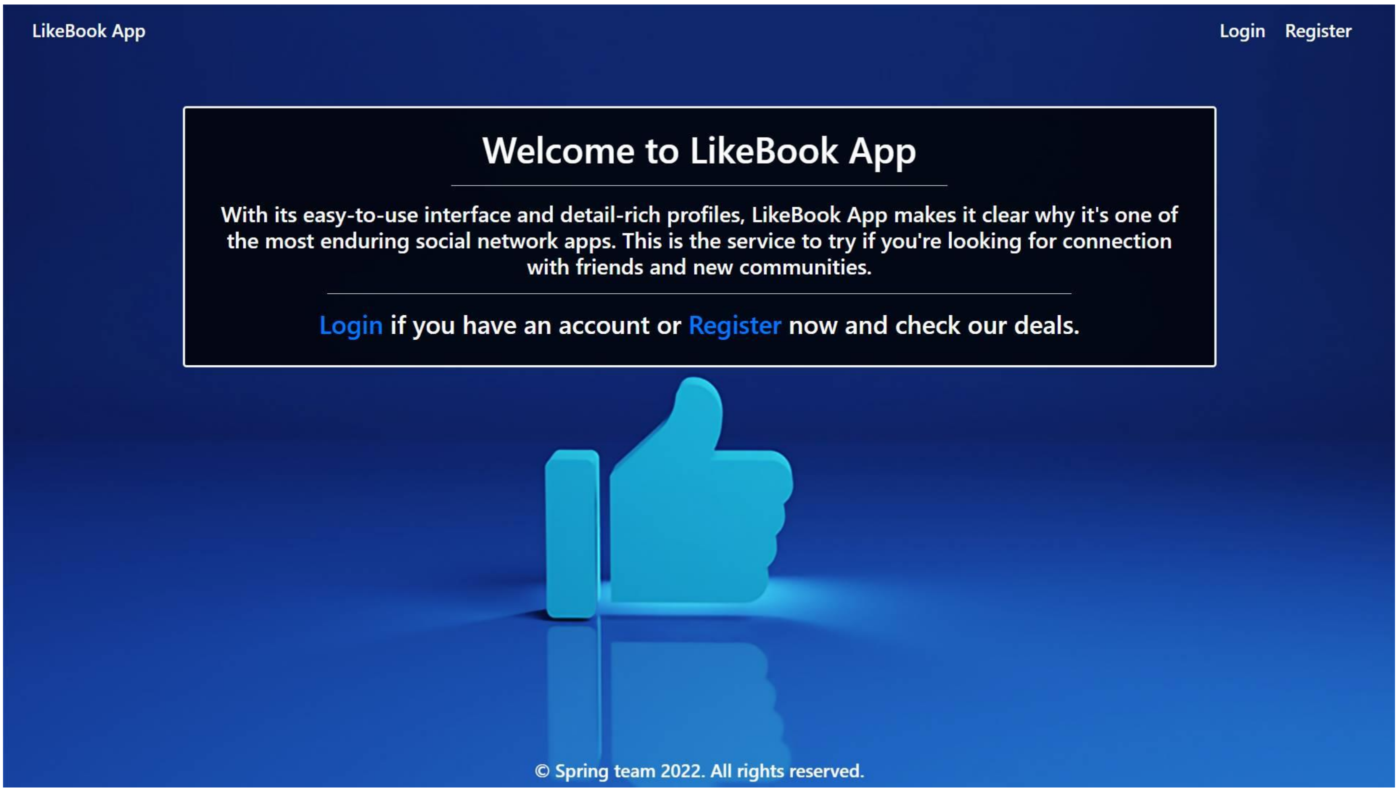
Implement the entities with the **correct data types** and implement **repositories** for them.

2. Initialize moods

- Implement a method that checks (when the app started) if the database does not have moods and initialize them
  - **You are free to do it in different ways.**

3. Page Requirements

Index Page (logged out user)



Welcome to LikeBook App

With its easy-to-use interface and detail-rich profiles, LikeBook App makes it clear why it's one of the most enduring social network apps. This is the service to try if you're looking for connection with friends and new communities.

Login if you have an account or Register now and check our deals.

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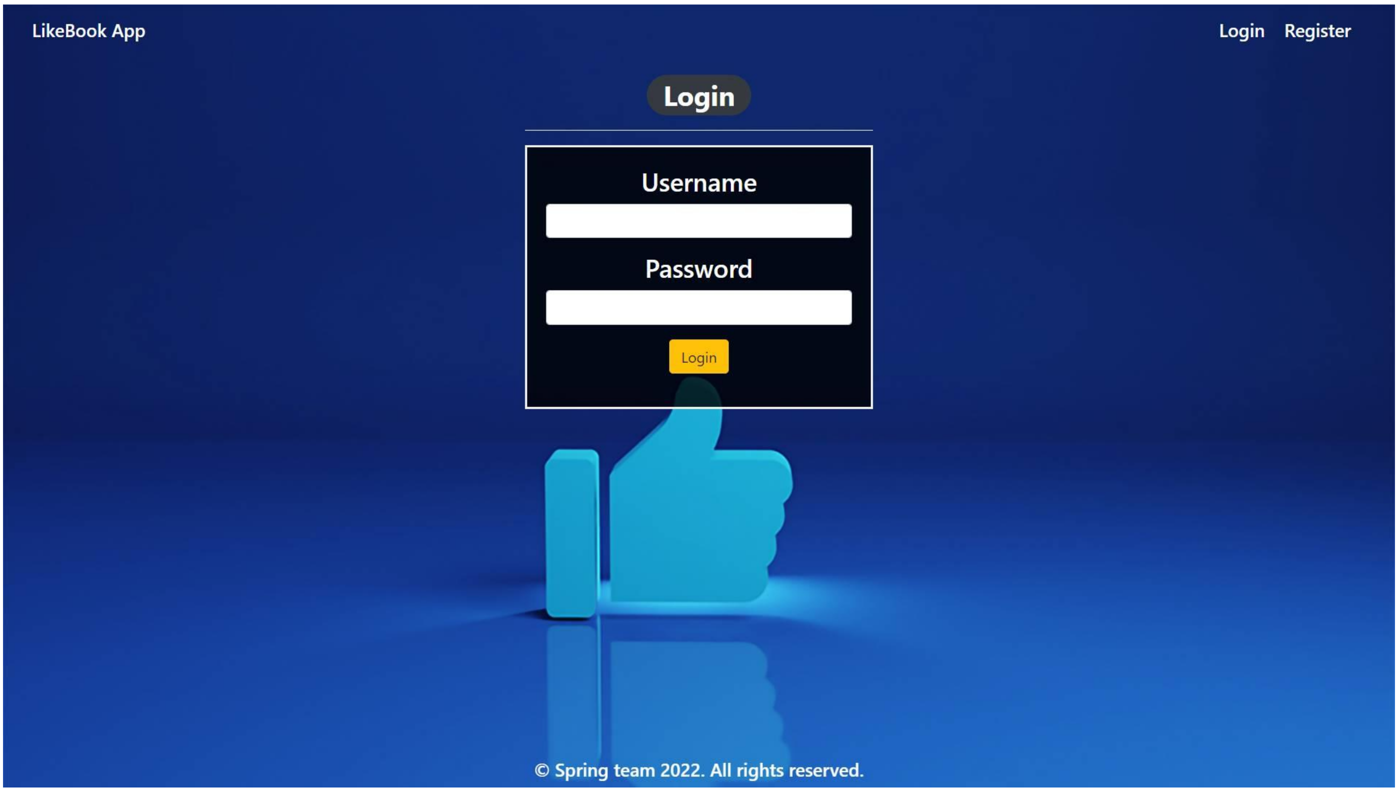
Login Page (logged out user)



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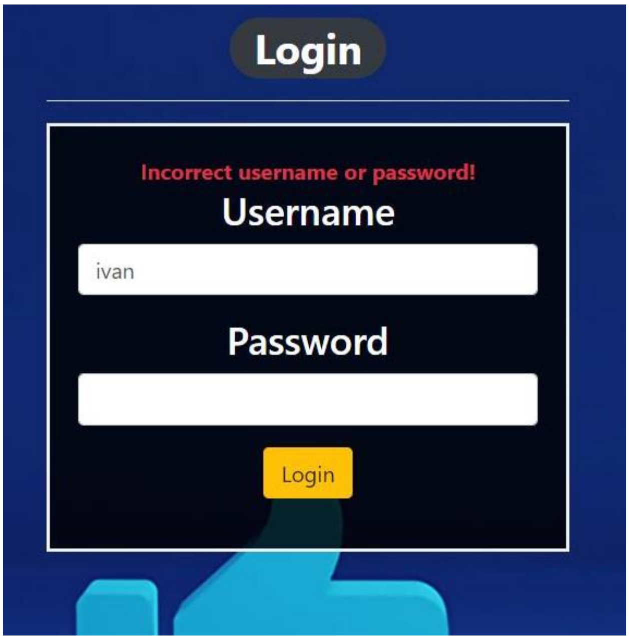
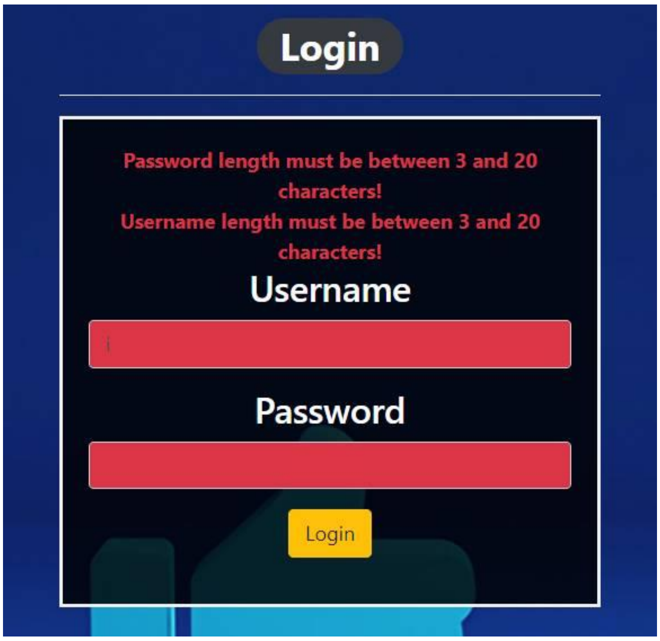
Login Page validations



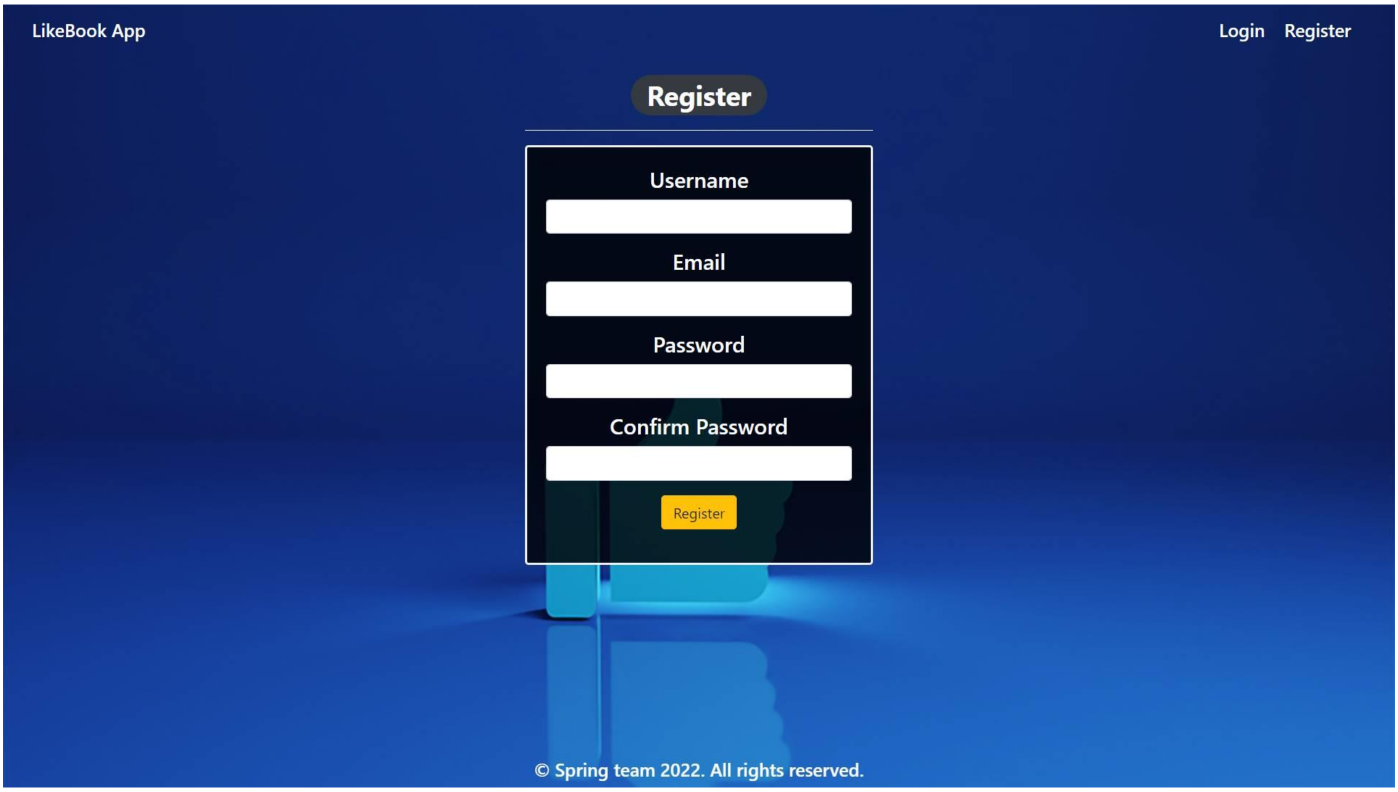
Incorrect username or password!



Password length must be between 3 and 20 characters!

Username length must be between 3 and 20 characters!

Register Page (logged out user)



LikeBook App

Login Register

Register

Username

Email

Password

Confirm Password

Register

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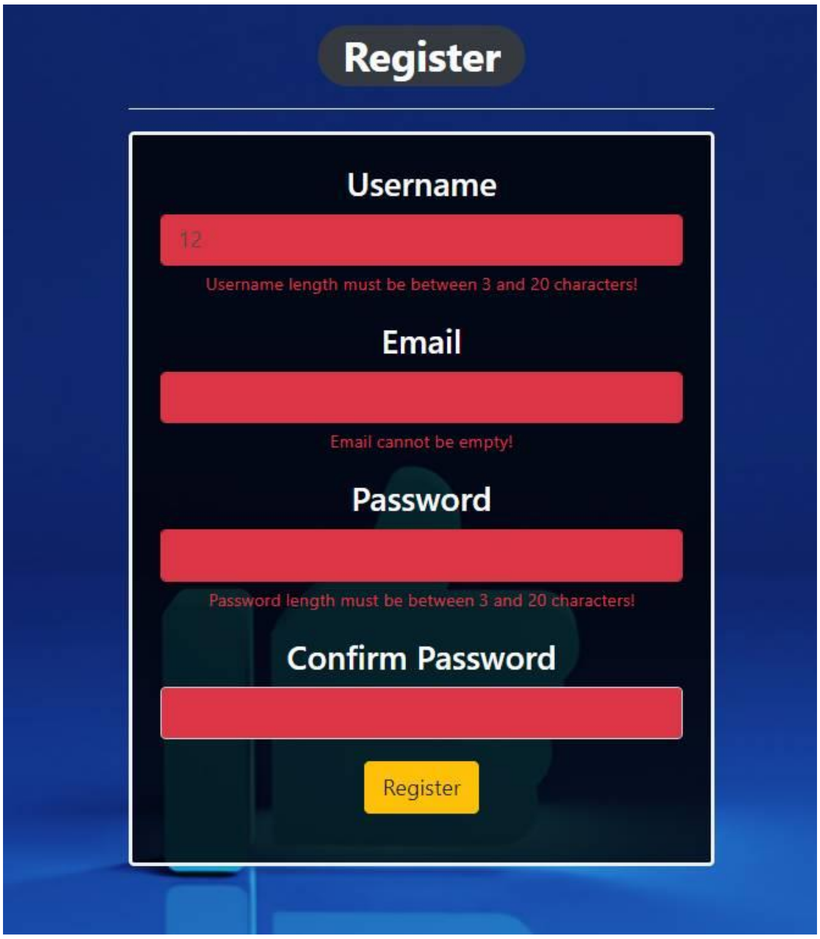
Register Page validations



Register

Username

12

Username length must be between 3 and 20 characters!

Email

Email cannot be empty!

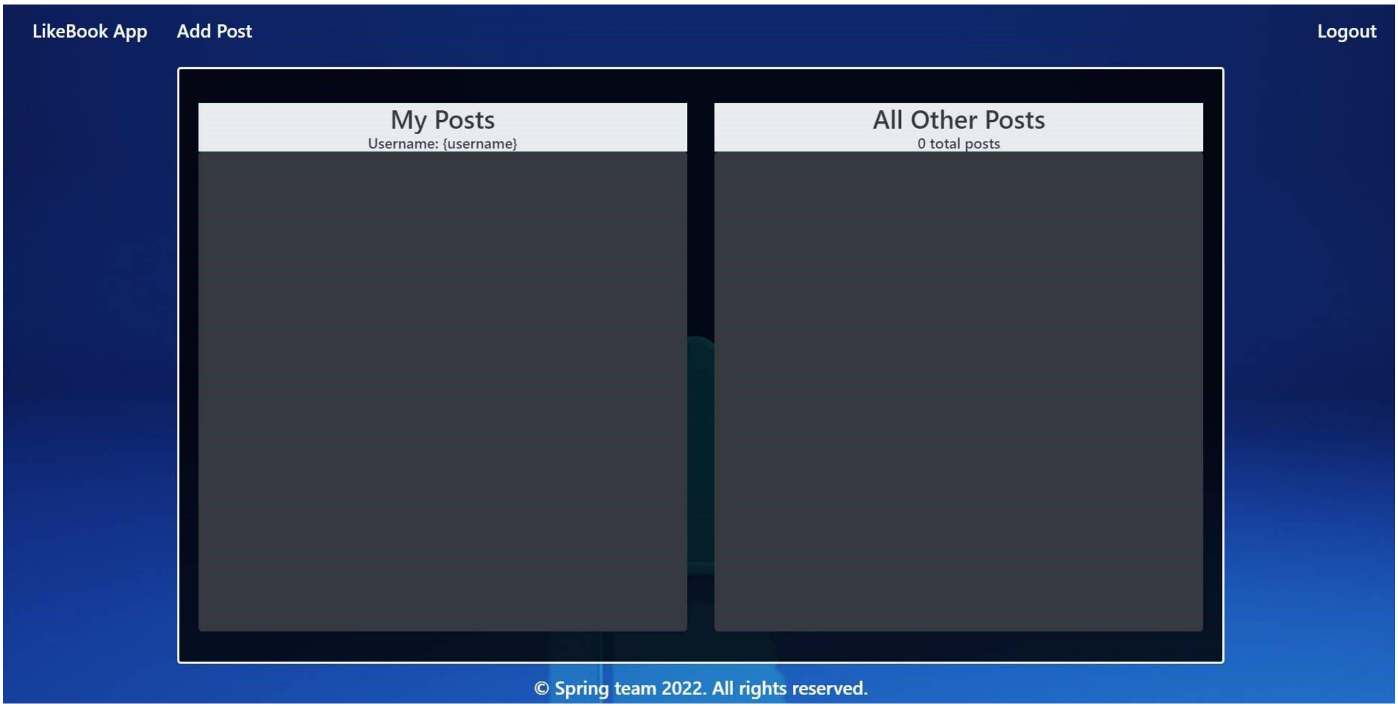
Password

Password length must be between 3 and 20 characters!

Confirm Password

Home Page (without having any posts)

- Note: The left section of the page should visualize **current logged user's posts** from the database.
- Note: The right section (All Other Posts) of the page should visualize **posts** created by other users.



My Posts

Username: {username}

All Other Posts

0 total posts

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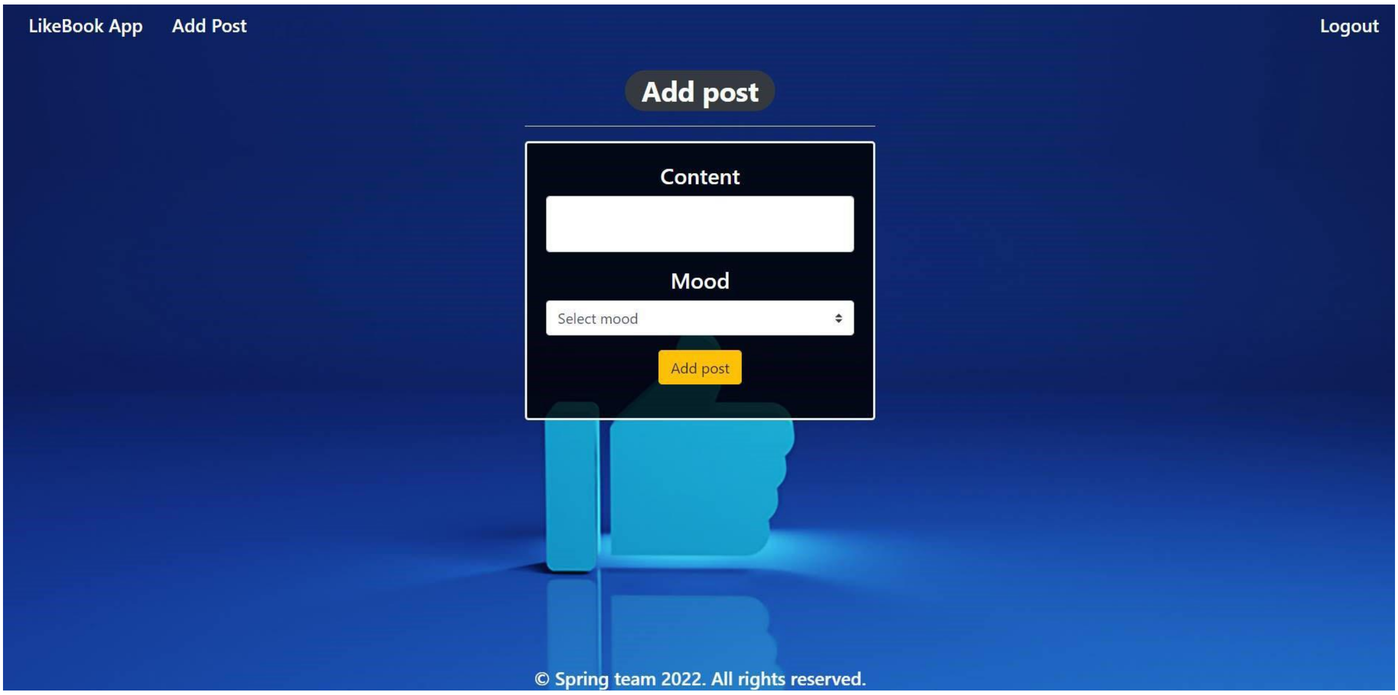
Add post



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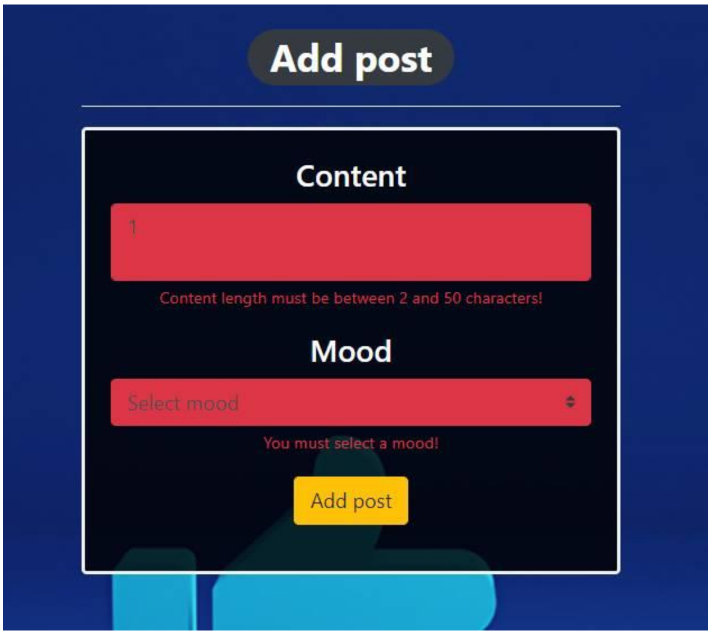
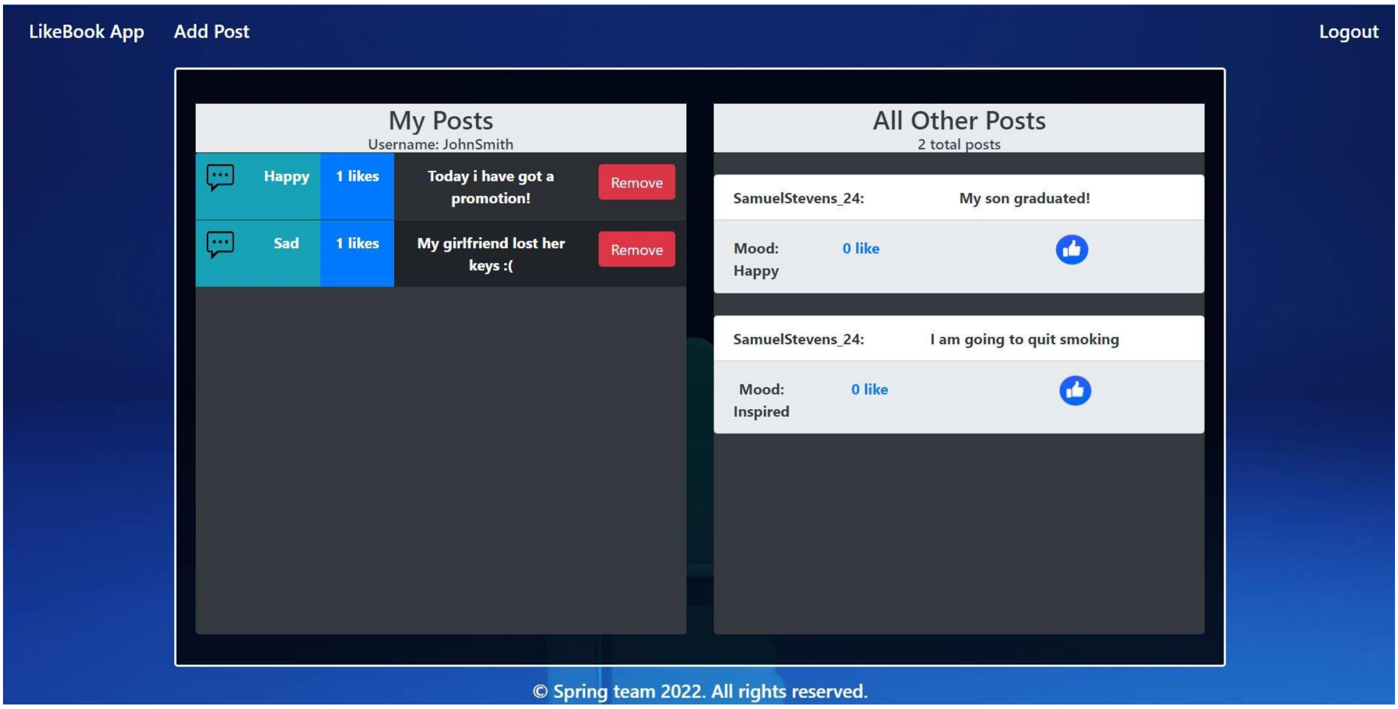
Add post validation



Content length must be between 2 and 50 characters!

You must select a mood!

Home Page (with posts)



Happy	1 likes	Today i have got a promotion!	Remove
Sad	1 likes	My girlfriend lost her keys :(	Remove

SamuelStevens_24: My son graduated!

Mood: Happy 0 like

SamuelStevens_24: I am going to quit smoking

Mood: Inspired 0 like

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The templates have been given to you in the application skeleton, so make sure you implement the pages correctly.

NOTE: The templates should look **EXACTLY** as shown above.

NOTE: The templates do **NOT require additional CSS** for you to write. Only **bootstrap** and the **given CSS** are enough.

4. Functional Requirements

The Functionality Requirements describe the functionality that the application must support.

The application should provide **Guest** (not logged in) users with the functionality to log in, register and view the Index page.

The application should provide **Users** (logged in) with the functionality to **log out, add a new post (Add Post page), view all posts (Home page) and like other people's posts from the All Other Posts section and remove their posts from the My Posts section.**

LikeBook App in the navbar should **redirect** to the appropriate URL depending on that if the **user is logged in**.

The application should provide functionality for **adding posts** with moods of **Happy, Sad and Inspired**.

The posts should be separated into different sections according to their creator.

When the user clicks on the **Like button of some post**, he likes the post. When he clicks on the **Remove** button, just delete the post from his **posts** in DB and redirect to the home page.

Bellow the All Other Posts banner is located an info bar that shows the **sum of all posts made by other users**.

The application should store its data in a MySQL database.

5. Security Requirements

The **Security Requirements** are mainly access requirements. Configurations about which users can access specific functionalities and pages.

- **Guest** (not logged in) users can access the **Index** page.
- **Guest** (not logged in) users can access the **Login** page.
- **Guest** (not logged in) users can access the **Register** page.
- **Users** (logged in) can access the **Home** page.
- **Users** (logged in) can access **Add Post** page.
- **Users** (logged in) can access the **Logout** functionality.

6. Scoring

Database – 10 points.

Pages – 25 points.

Functionality – 35 points.

Security – 5 points.

Validations – 15 points.

Code Quality – 10 points.