JS Back-End Exam – Book Talk

1. Exam Rules:

1. You have **4 hours**
2. When you are ready, delete the ***node_modules*** folder, make sure all dependencies are listed in the ***package.json*** file and submit your archiving project.
3. You are provided with **HTML & CSS** resources
4. You may **add attributes** (such as **class** and **dataset**), but it is forbidden to **change existing** attributes (such as **class** and **id**)
5. You may **change "href"** attributes on links and add/change the **method** and **action** attributes of HTML Forms.
6. Use **Express.js** as a back-end framework
7. Use **MongoDB** as a database with **mongoose**
8. You can use whatever **view engine** you like (**express-handlebars**, EJS, Pug, etc.)
9. Use **bcrypt for hashing the password**
10. The application **must start** from the file **"index.js"** on port **3000**
11. It is **forbidden** to **use React**, **Vue**, **Angular,** etc.
12. **Only the last submission will be evaluated!**

2. Application Overview

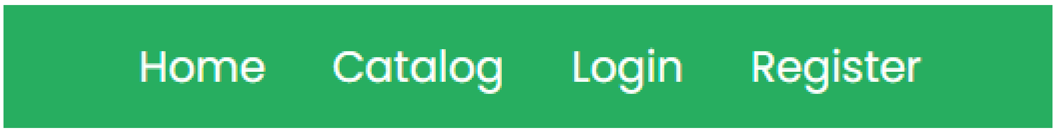
Get acquainted with the provided **HTML and CSS** and create an application for the **book review**.

The visitors can **view** the **Home page** and **Catalog** page with available reviews. They can also **register** with an **email**, **username**, and **password**, allowing them to create their **review** for the **book** and **add it to the wishing list** (if the **current user** is **not** the **owner of the book** review). Authors can edit or delete posts at any time.

3. Functional Requirements

Guest (not logged in)

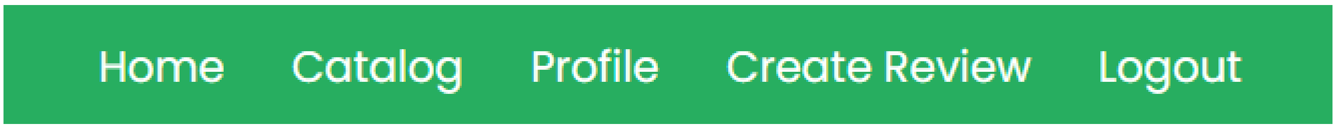
Guest navigation example:



The **application** should provide **Guest** (not logged in) users with the functionality to **Login**, **Register**, and **view** the **Home** page, **Catalog** page, and **Details** page.

Users (logged in)

User navigation example:



The **application** should provide **Users** (logged in) with the functionality to:

- **View the Home page and all other pages with logged-in navigation**

- **View Catalog Page**
- **Create a new book review [Create Review]**
- **Access book details page [Details]**
- **Wish to read** (if the **current user** is **not** the **owner of the review)**
- **Delete or Edit the review depending on the user's authentication (only for the owner of the current book review)**

4. Database Models

The **Database** of the **Book Talk** application needs to support **two entities**:

User

- **Username - string (required),**
- **Email - string (required),**
- **Password - string (required)**

Book

- **Title - String (required),**
- **Author: String (required),**
- **Image: String (required),**
- **Book Review: String (required),**
- **Genre: String (required),**
- **Stars: Number (required) between 1 and 5,**
- **WishingList – a collection of Users (a reference to the User model)**
- **Owner - object Id (a reference to the User model)**

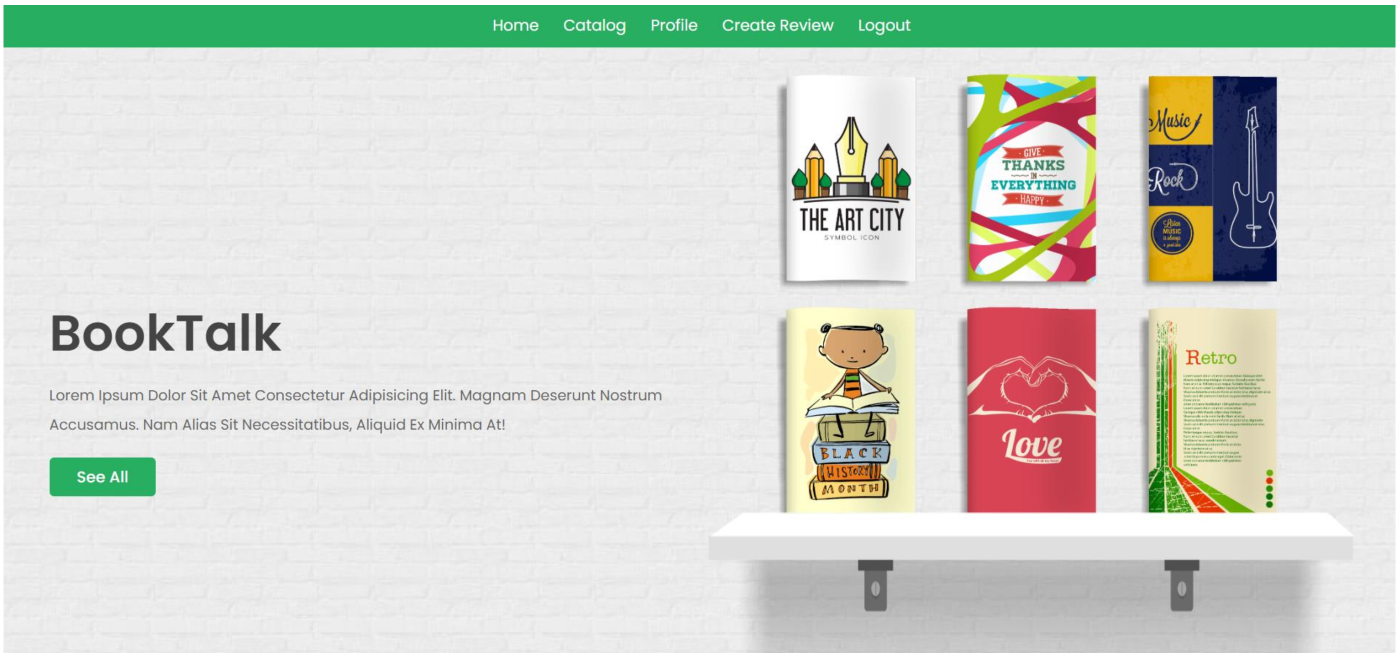
Note: When a user adds a book to their Wishlist, their **id** is added to that collection (**WishingList**)

Implement the entities with the correct data types.

5. Application Pages (80 pts)

Home Page (For logged in users and logged-out users)

Visualize **static home page**.

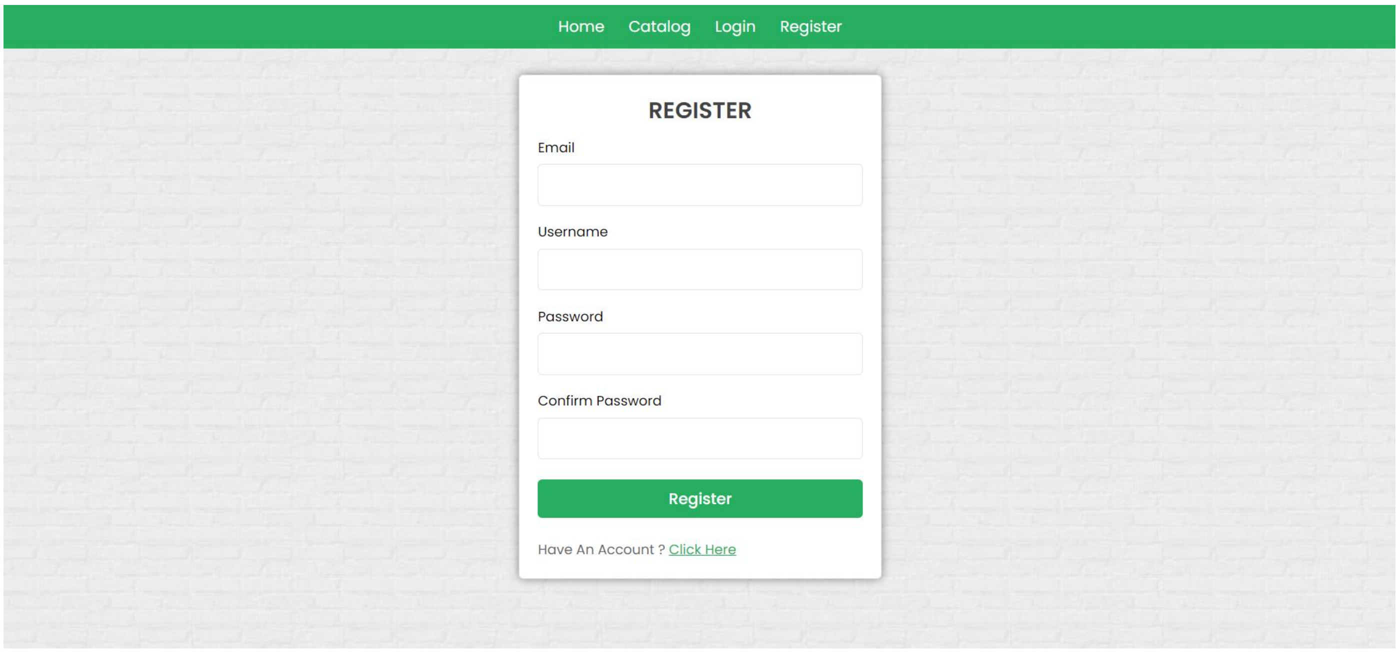


BookTalk

Lorem Ipsum Dolor Sit Amet Consectetur Adipisicing Elit. Magnam Deserunt Nostrum Accusamus. Nam Alias Sit Necessitatibus, Aliquid Ex Minima At!

Register Page (Logged Out User)

Register a user inside the Database with a **username, email, and password**. **Password** inside the **Database** must be hashed (**use bcrypt**), and both passwords **must match**! After successful registration, you should **redirect** the logged-in user to the **Home page**.



REGISTER

Email

Username

Password

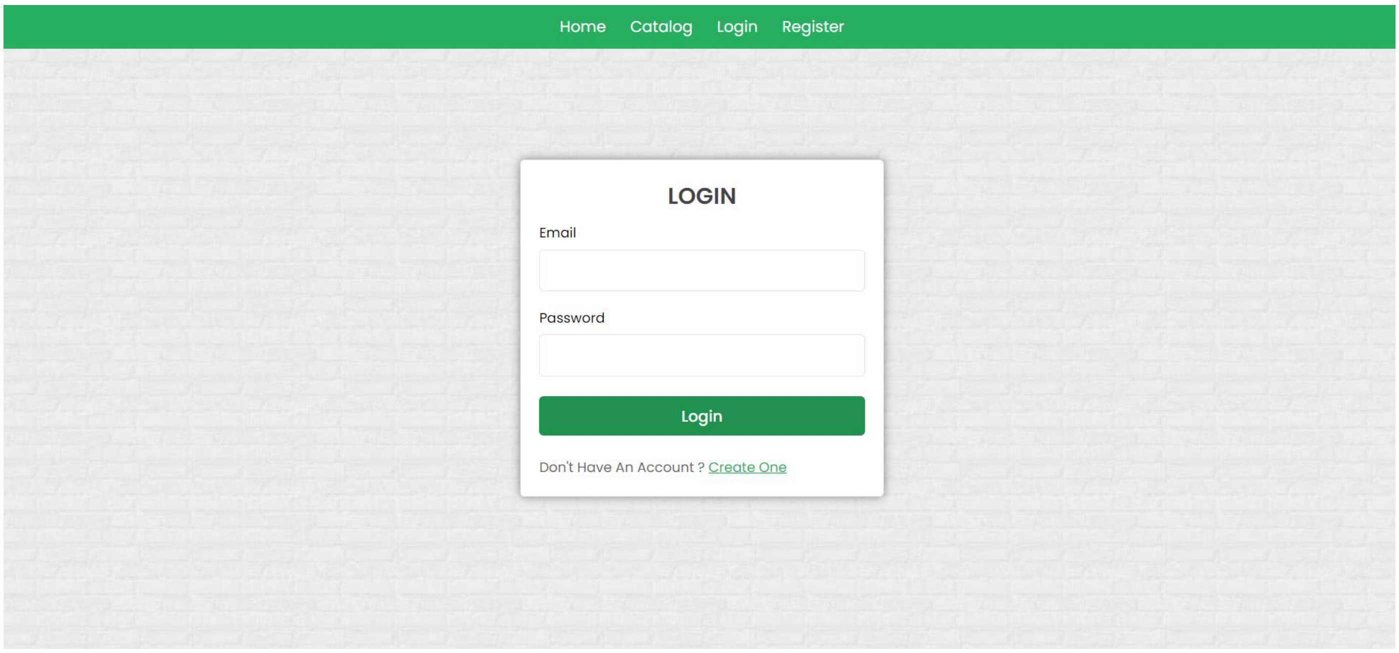
Confirm Password

Register

Have An Account ? Click Here

Login Page (Logged Out User) - (5 Pts)

Logging an already registered user with the correct **email** and **password**. After successful login, you should **redirect to the Home page.**

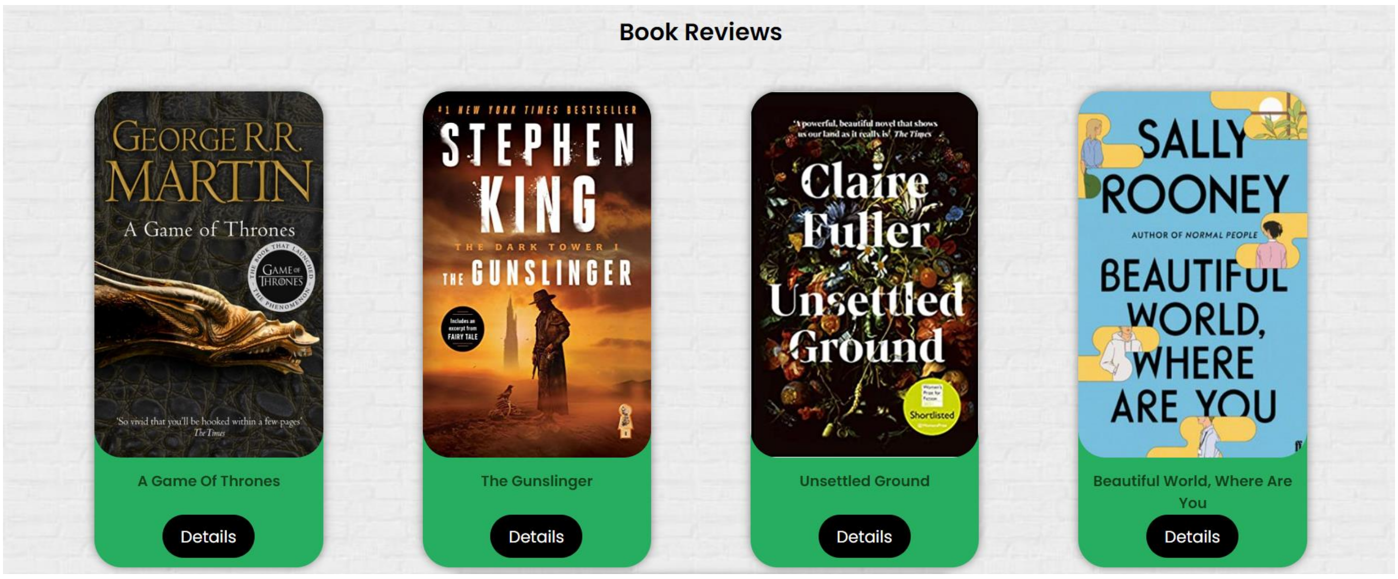


Logout (logged in user)

The logout action is available to **logged-in** users. Upon success, clear any session information and **redirect** the user to the **Home** page.

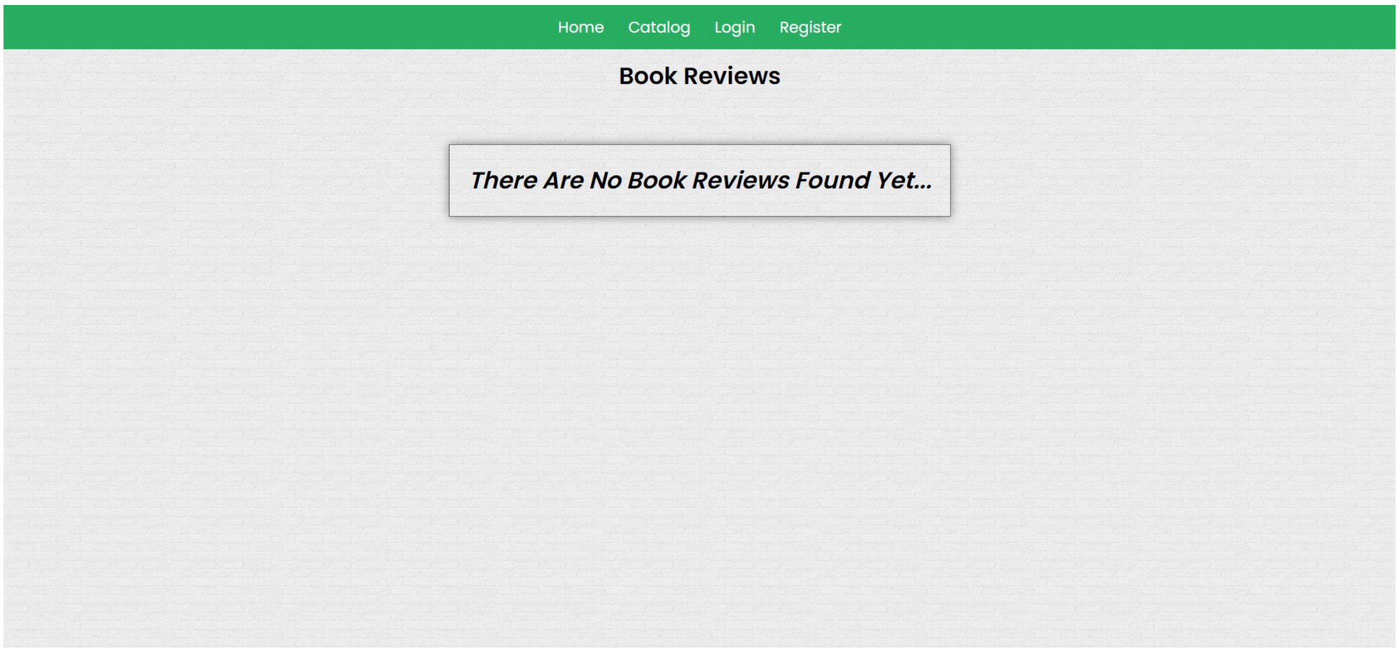
Book Catalog (For logged in users and logged out users)

List of all books reviewed. Each offer must display information about the **book image**, the **name,** and a button for **details** about the **specific book**. As in the picture below:



[**Details**] button should be a link to the **details page** for the current book.

If there are <u>**NO**</u> book reviews in the Database, display "`There are no book reviews found yet…`"



Book Reviews

There Are No Book Reviews Found Yet...

Details Page - (for logged in users and logged out users)

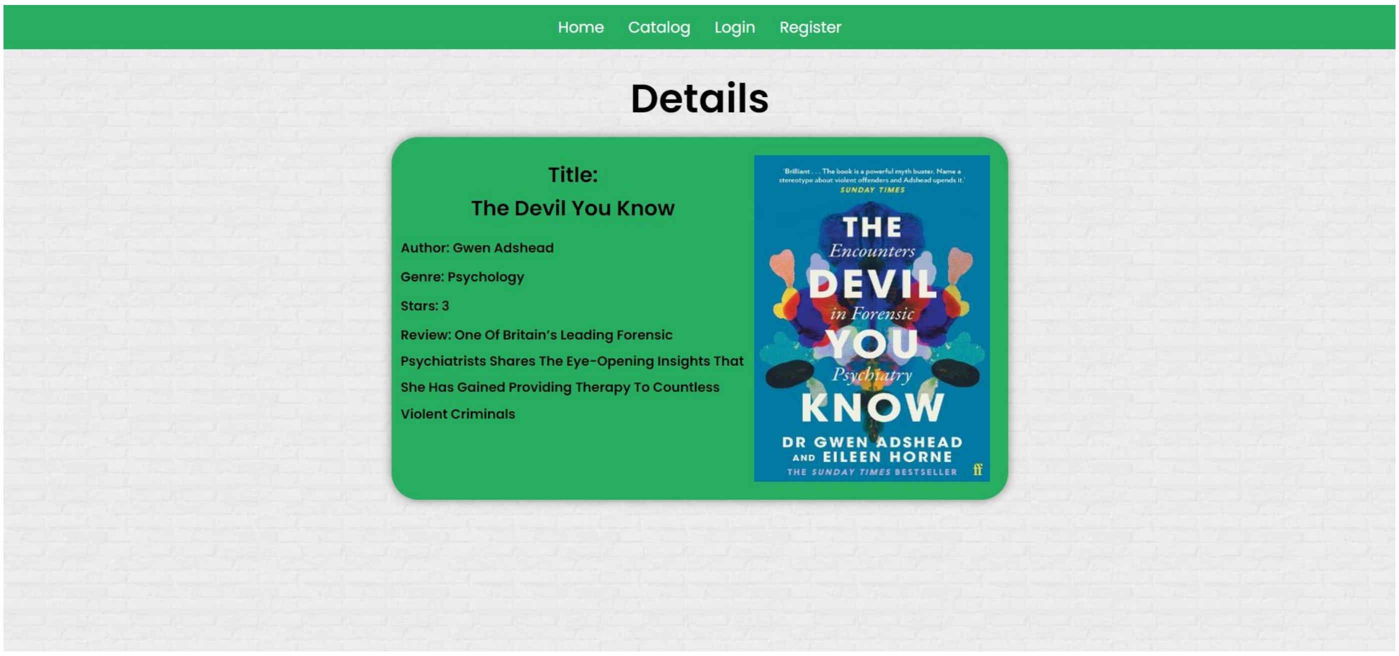
All users should be able **to see details**. Clicking the **Details button** on the book card should display the details page. If the currently registered user **is the creator** of the book review, the **Edit** and **Delete** buttons should be displayed. Otherwise, they **should not be available**.

Information about the book:

- **Title**
- **Author**
- **Genre**
- **Stars**
- **Image**
- **Review**
- **Buttons** (Depending on the status of the currently logged in user)

Details Page (logged out users)

If there are **no logged**-in users, **no buttons** should be displayed.



Details

Title:
The Devil You Know

Author: Gwen Adshead

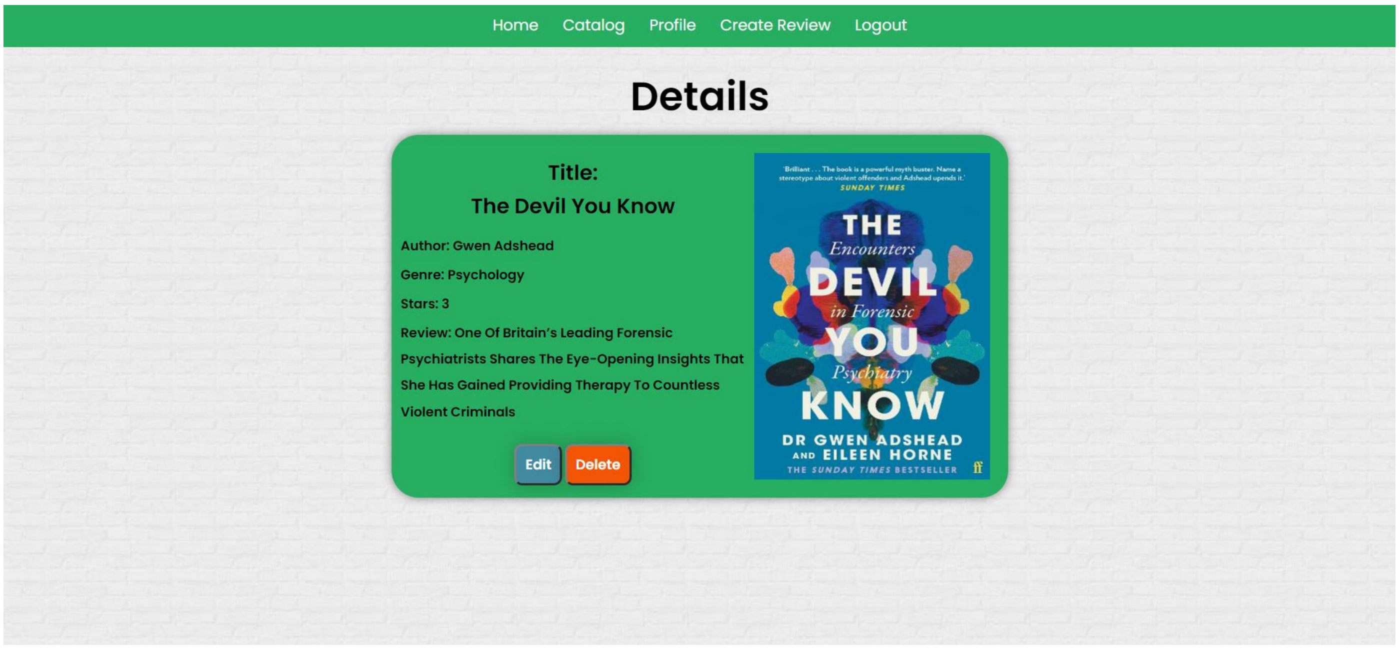
Genre: Psychology

Stars: 3

Review: One Of Britain's Leading Forensic Psychiatrists Shares The Eye-Opening Insights That She Has Gained Providing Therapy To Countless Violent Criminals

Details Page (logged in user and creator of the current review)

If the **currently logged-in** user is the **owner** (the user who **created the book review**), he should see the **[Delete]** and **[Edit]** buttons.



Details

Title:
The Devil You Know

Author: Gwen Adshead

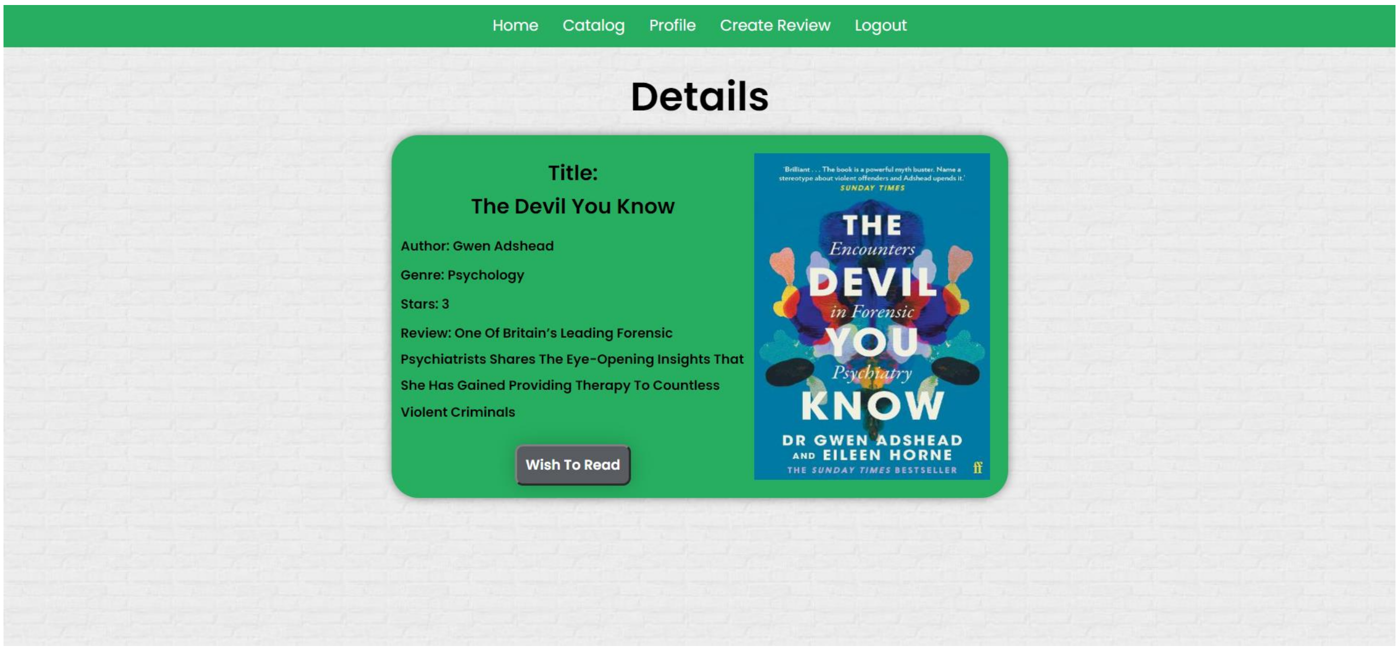
Genre: Psychology

Stars: 3

Review: One Of Britain's Leading Forensic Psychiatrists Shares The Eye-Opening Insights That She Has Gained Providing Therapy To Countless Violent Criminals

Details Page (logged in user without wishing book)

If the currently logged-in user is **not the owner** (a user who is not the creator of this book review) and has not wished to read that book, he should see a **wish to read** button.



Details

Title:
The Devil You Know

Author: Gwen Adshead

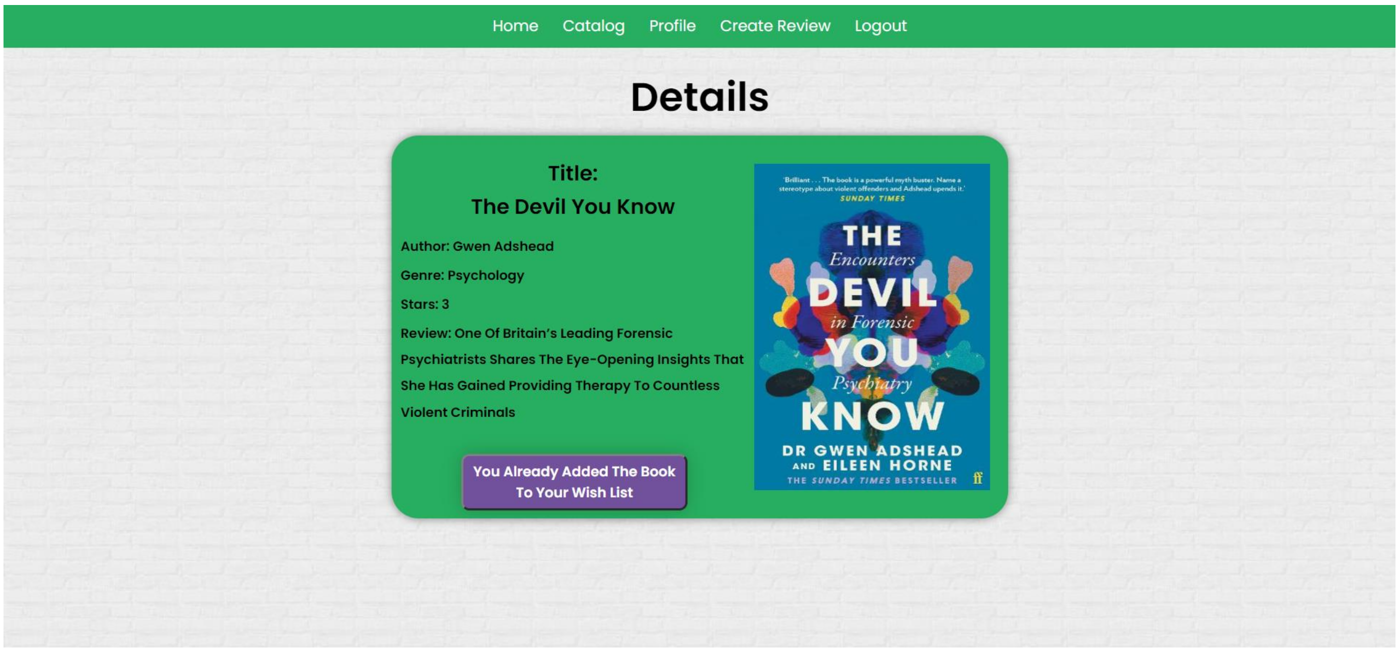
Genre: Psychology

Stars: 3

Review: One Of Britain's Leading Forensic Psychiatrists Shares The Eye-Opening Insights That She Has Gained Providing Therapy To Countless Violent Criminals

Details Page (logged in user already wished book)

If the currently logged in user **is not the owner** and has **already wished to read**, he should see **[`You already added the book to your wish list`].**



Details

Title:
The Devil You Know

Author: Gwen Adshead

Genre: Psychology

Stars: 3

Review: One Of Britain's Leading Forensic Psychiatrists Shares The Eye-Opening Insights That She Has Gained Providing Therapy To Countless Violent Criminals

Wish Book (logged in user who is not the current book owner)

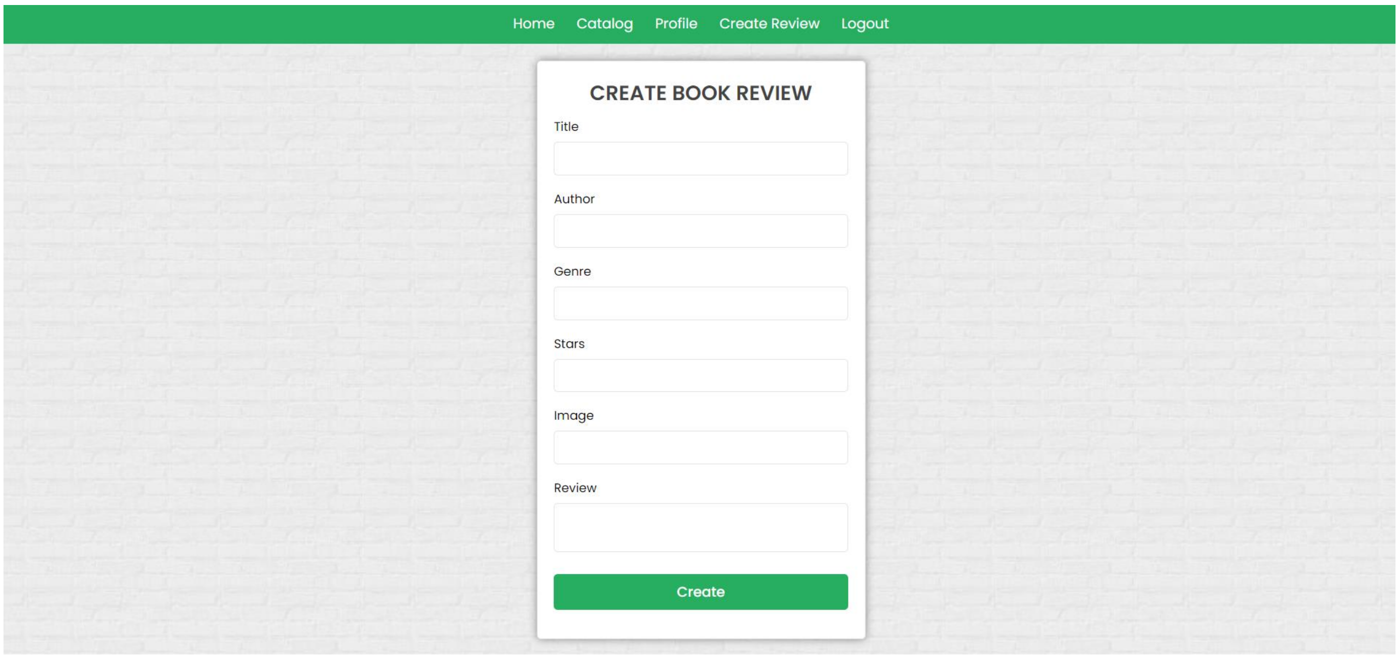
Any registered user who is **not** the current **owner** of the book review must be able **to Wish to read the book** (if any).

If he manages to **wish the book successfully**, his **userId** must be added to the collection of **Wishing List** and **redirect** the user to the **Details** page for the current **book review**.

If a user has once wished for a current book, he should see "**`You already added the book to your wish list`** ".

Create Review (Logged in User)

The **Create Review** page is available to **logged-in users**. It contains a form for adding a new book review. Upon success, **redirect** the user to the **Catalog** page.

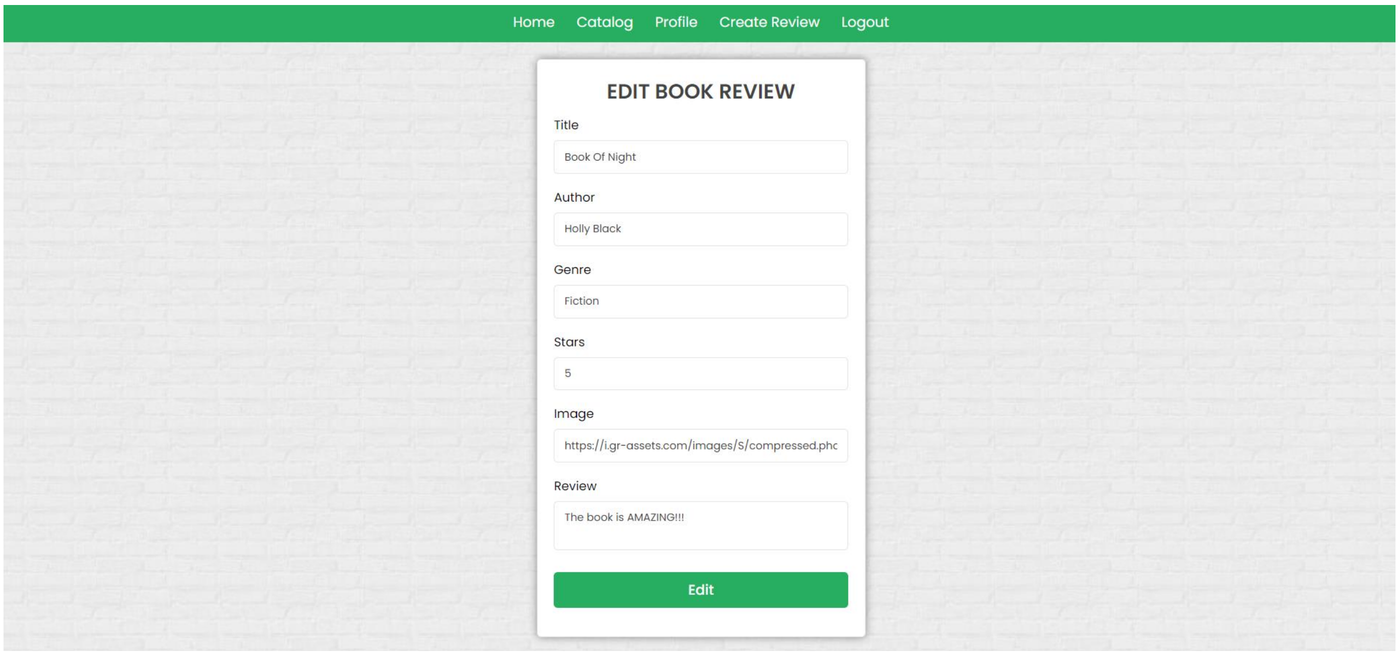


Delete Book Review (logged in user and owner of the current book review)

Each **owner** of the book review must be able to click on the **[Delete]** button and **delete the current book** from the Database, and the user must be redirected to the **Catalog** page.

Edit Book Review (logged in user and owner of the current book review)

Each **owner** can edit their **book review**. Clicking the **[Edit]** button for a specific review on the details page should display the **Edit page**, all fields being populated with book data. It contains a form with input fields for all relevant properties. If successful, redirect the user to the **current book details page**.



Title: Book Of Night

Author: Holly Black

Genre: Fiction

Stars: 5

Image: https://i.gr-assets.com/images/S/compressed.phc

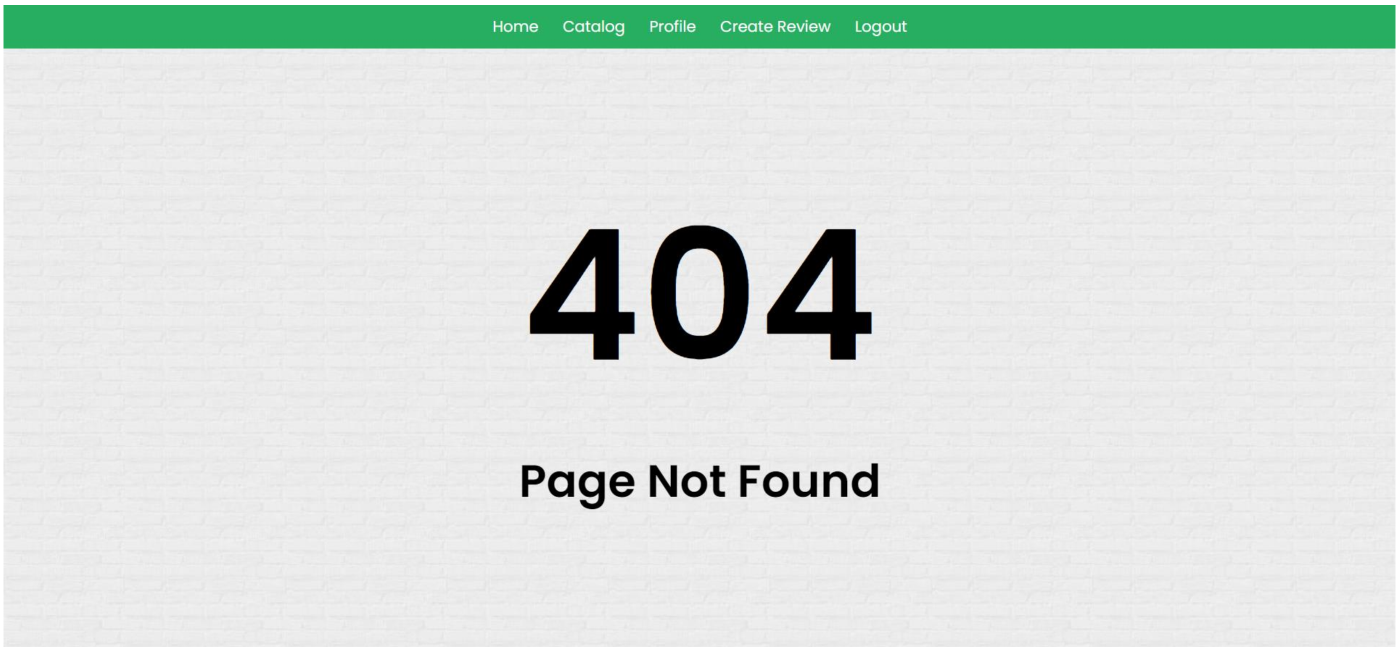
Review: The book is AMAZING!!!

6. Security Requirements (Routes Guards) - (10 Pts)

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 **Home** page.
- **`Guest`** (not logged in) users can access the **`Login`** page and functionality.
- **`Guest`** (not logged in) users can access the **`Register`** page and functionality.
- **Guest** (not logged in) and **Users** (logged in) can access the **Catalog page (Listed all book reviews)**.
- **Guest** (not logged in) can access the **Details** page without functionality.
- **Users** (logged in) can access the **Home** page.
- **`Users`** (logged in) can access the **`Details`** page and functionality.
  - **`Users`** (not book review owners) can **wish book**.
  - **`Users`** (book review owners) can **`Edit`** and **`Delete`** the current book review
- **`Users`** (logged in) can access **`Create Review`** page and functionality.
- **`Users`** (logged in) can access **`Logout`** functionality.

Use the following view for **invalid paths**:



7. Validation and Error Handling (10 Pts)

The application should **notify** the users about the result of their actions.

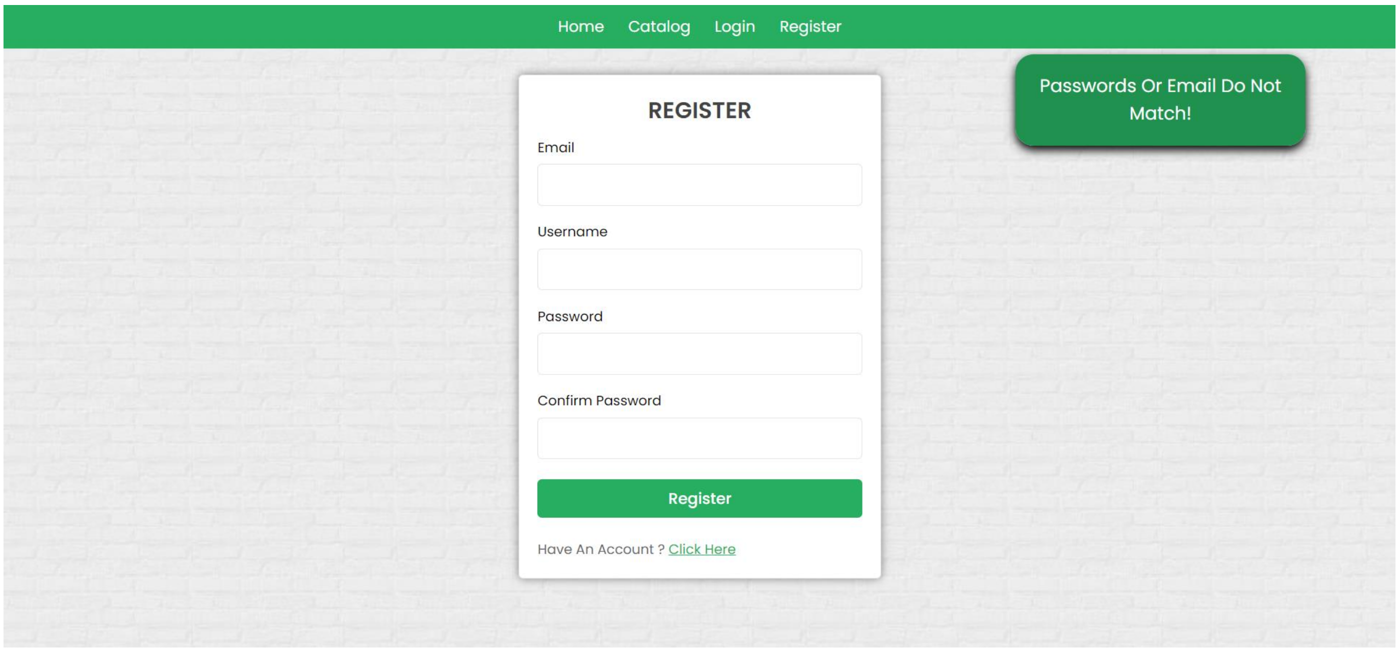
In case of error, you should display div with class "**errorContainer**"

You can choose to display the first error or all of them. You have complete freedom to choose the content of the error message you will display.

Login / Register

You should make the following validations:

- The **username** should be **at least 4 characters** long
- The **email** should be **at least 10 characters** long
- The **password** should be **at least 3 characters** long
- The **repeat password** should be **equal to the password**


Home Catalog Login Register

Passwords Or Email Do Not Match!

REGISTER

Email

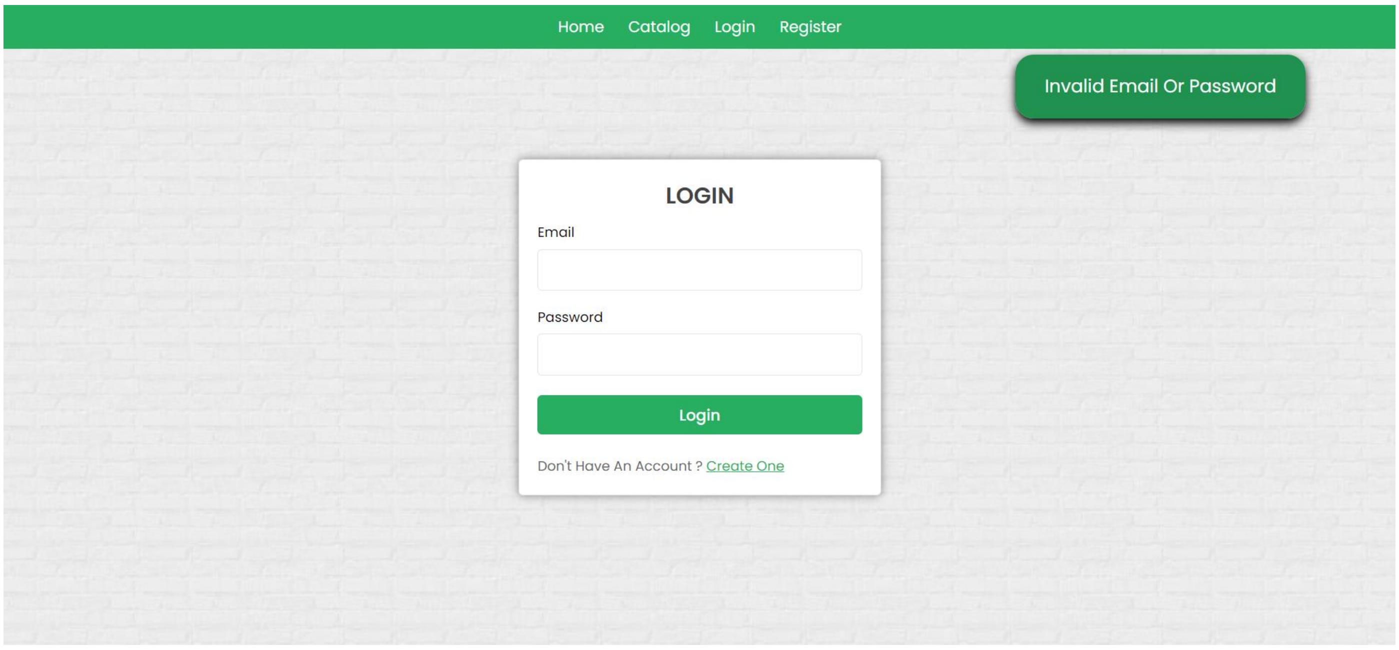
Username

Password

Confirm Password

Register

Have An Account ? Click Here


Home Catalog Login Register

Invalid Email Or Password

LOGIN

Email

Password

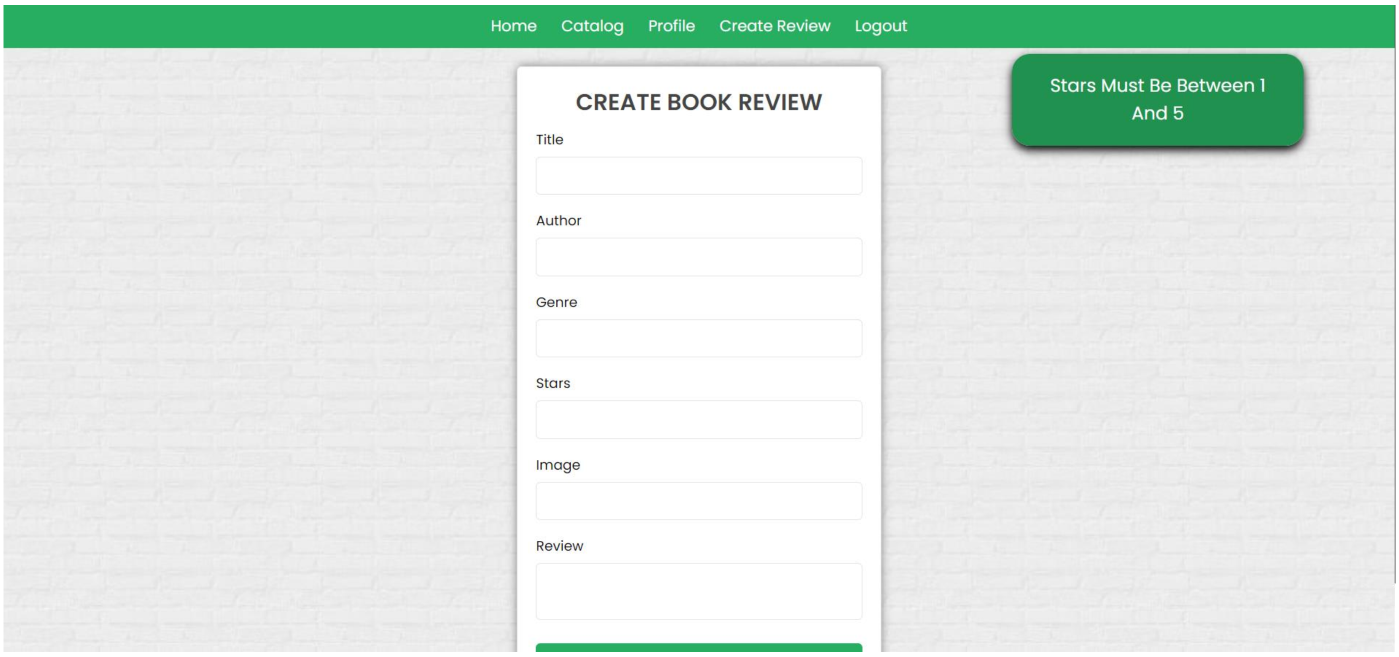
Login

Don't Have An Account ? Create One

Book

You should make the following validations while **creating** or **editing a book review**:

- The **Title** should be **at least 2 characters**
- The **Author** should be **at least 5 characters**
- The **Genre** should be **at least 3 characters**
- The **Stars** should be a **positive number between 1 and 5**
- The **Image** should start with **http:// or https://**.
- The **Review** should be a minimum of **10 characters** long.



CREATE BOOK REVIEW

Title

Author

Genre

Stars

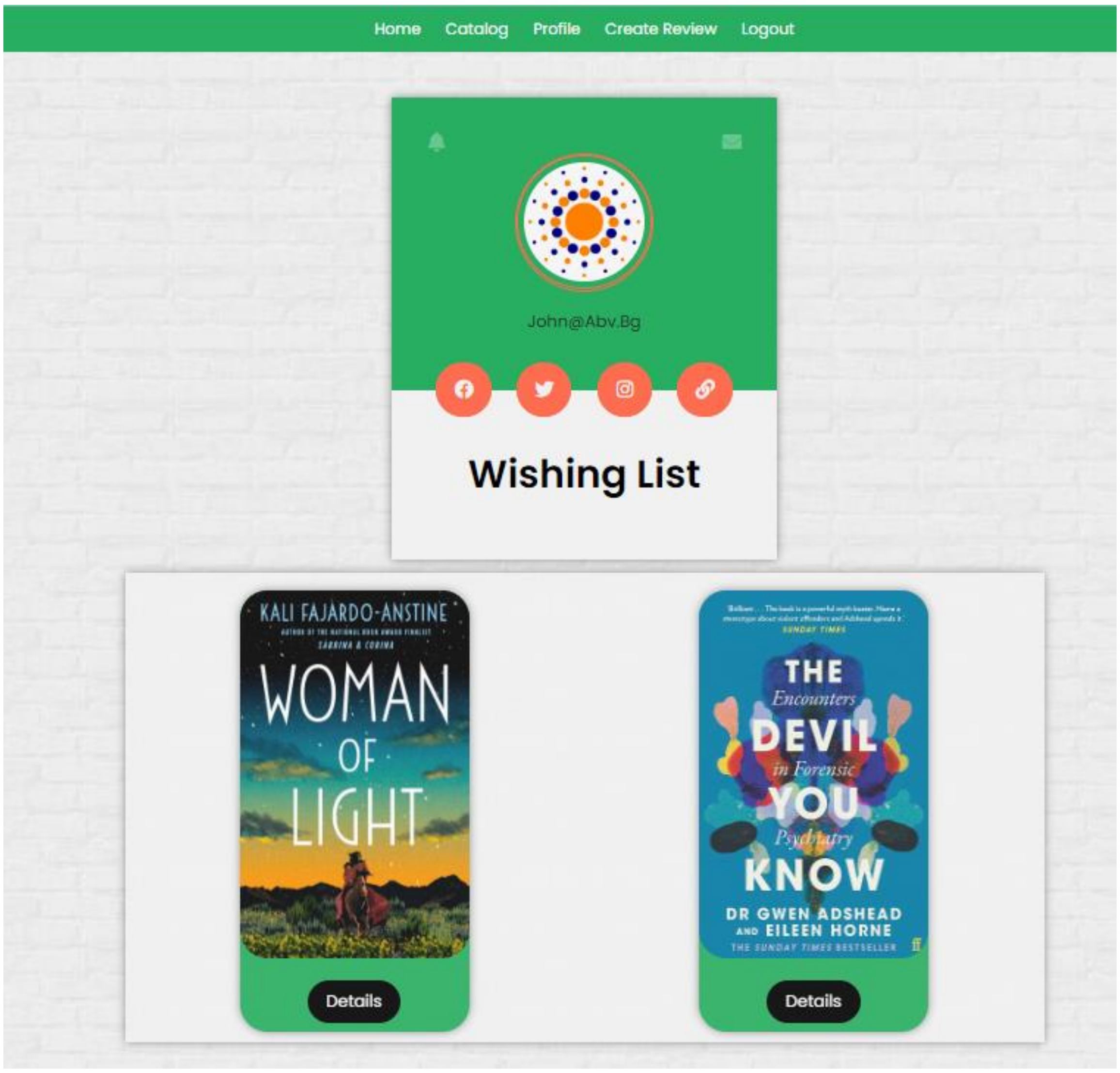
Image

Review

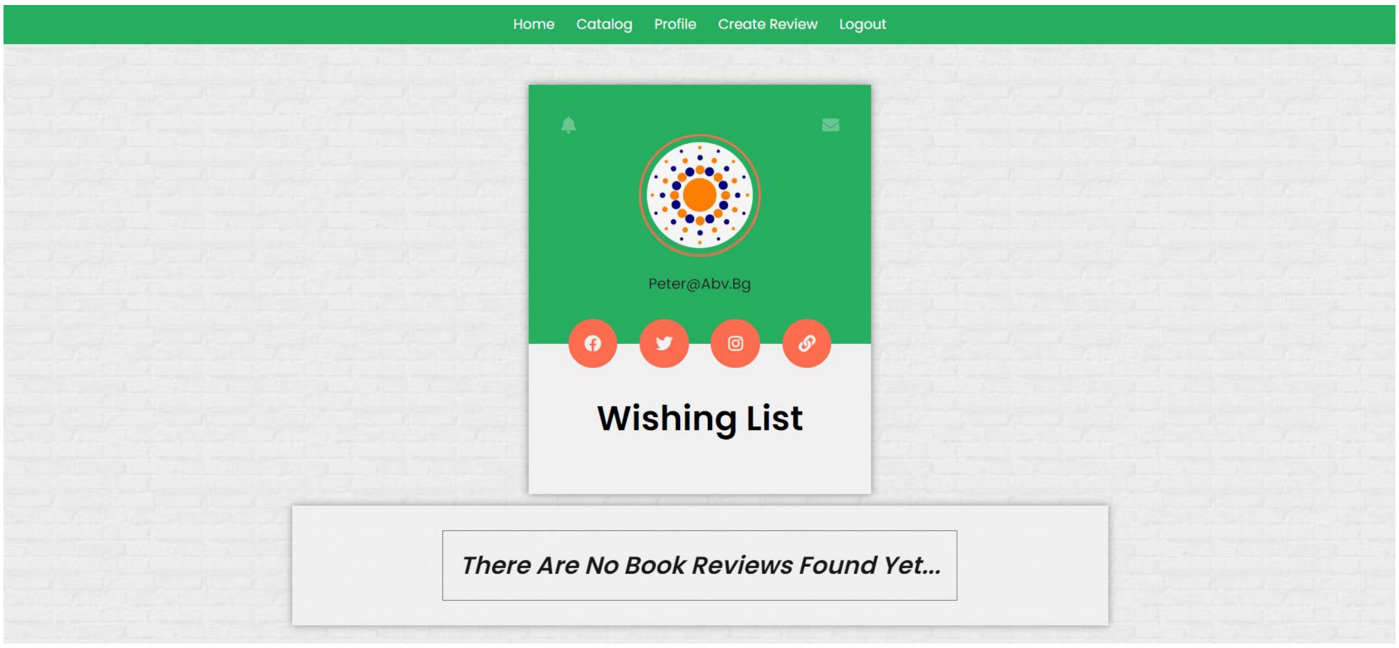
Stars Must Be Between 1 And 5

* Bonus – Profile (10 Pts)

Each **logged-in user** should be able to view their profile information by clicking [**Profile**]. **Email and wishing book titles (**which the **current user** has **wished).**



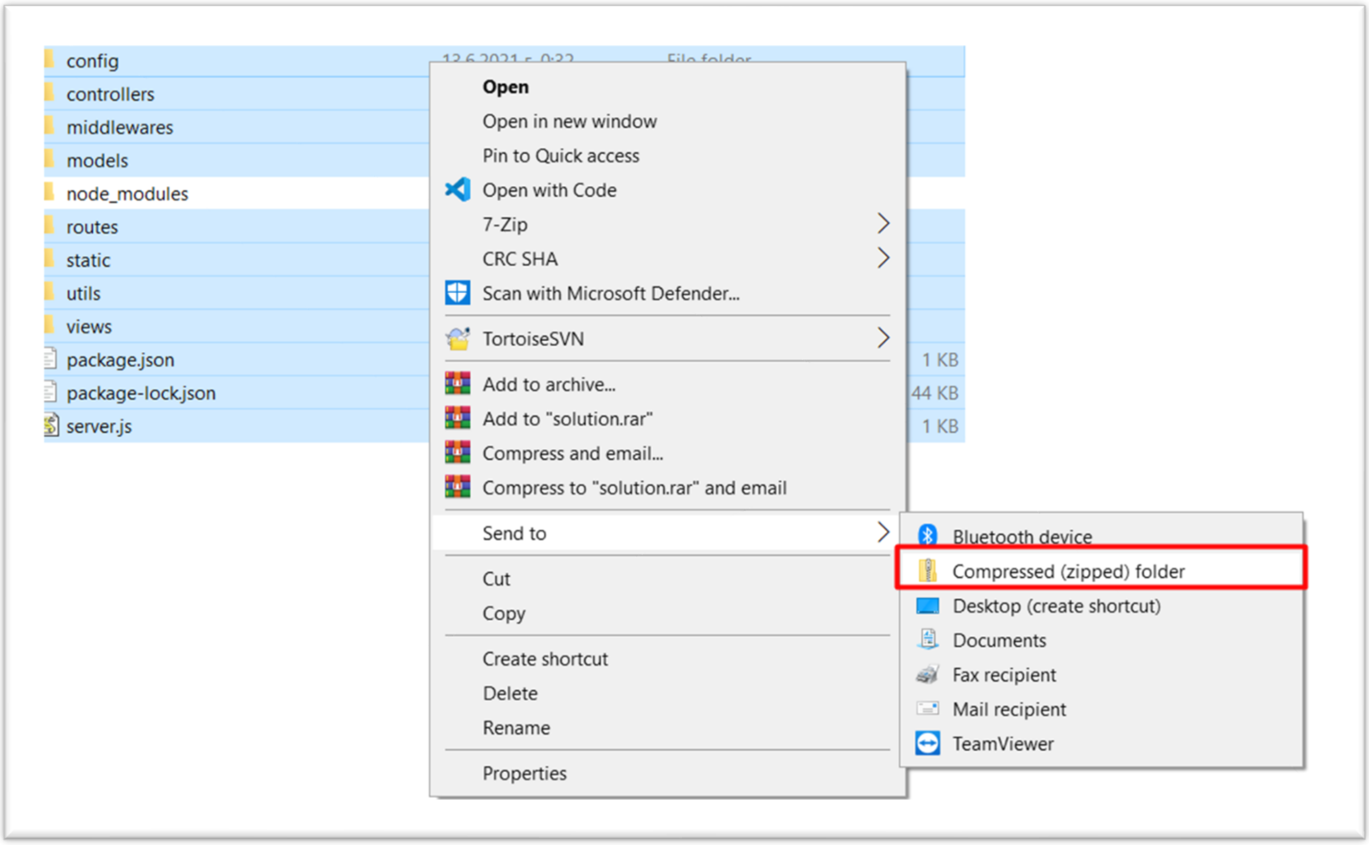
Otherwise, if there are **no wished books** yet, the message **"There are no book reviews found yet..."** should be visualized.

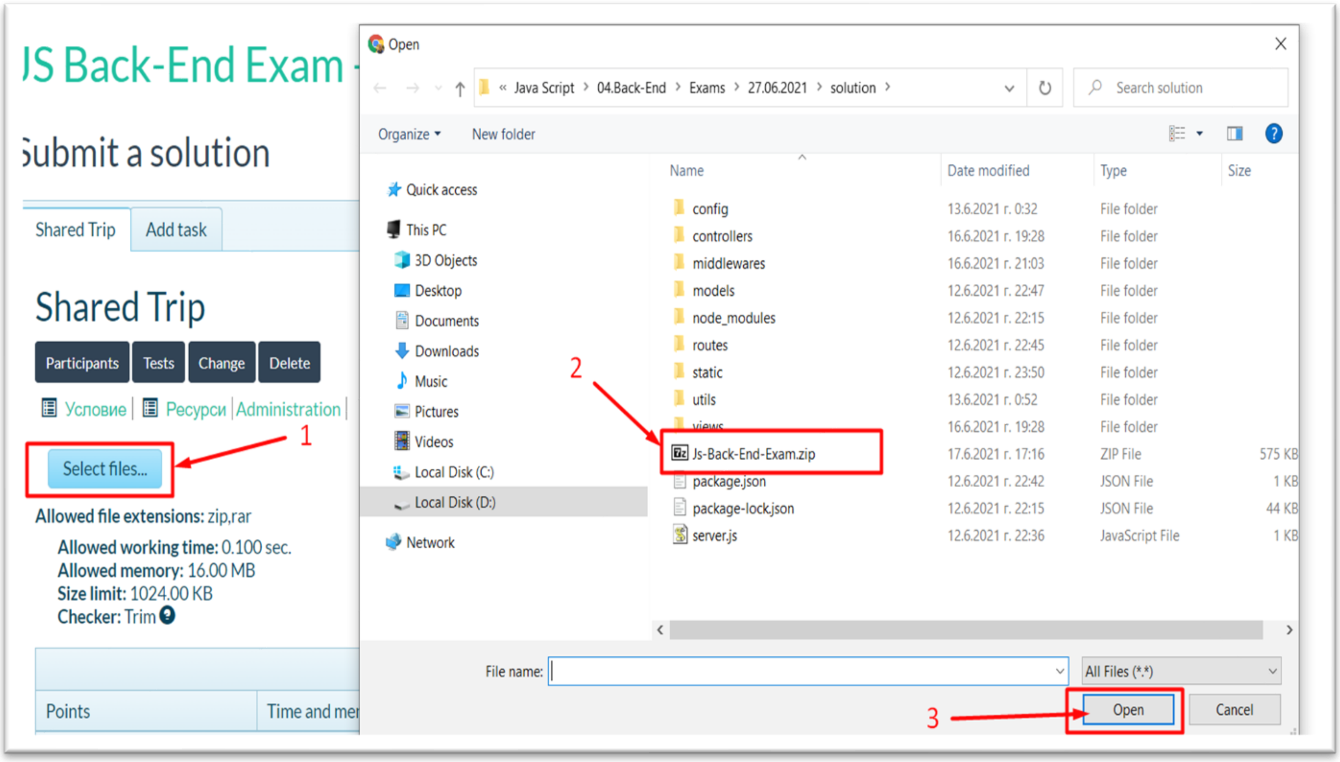


There Are No Book Reviews Found Yet...

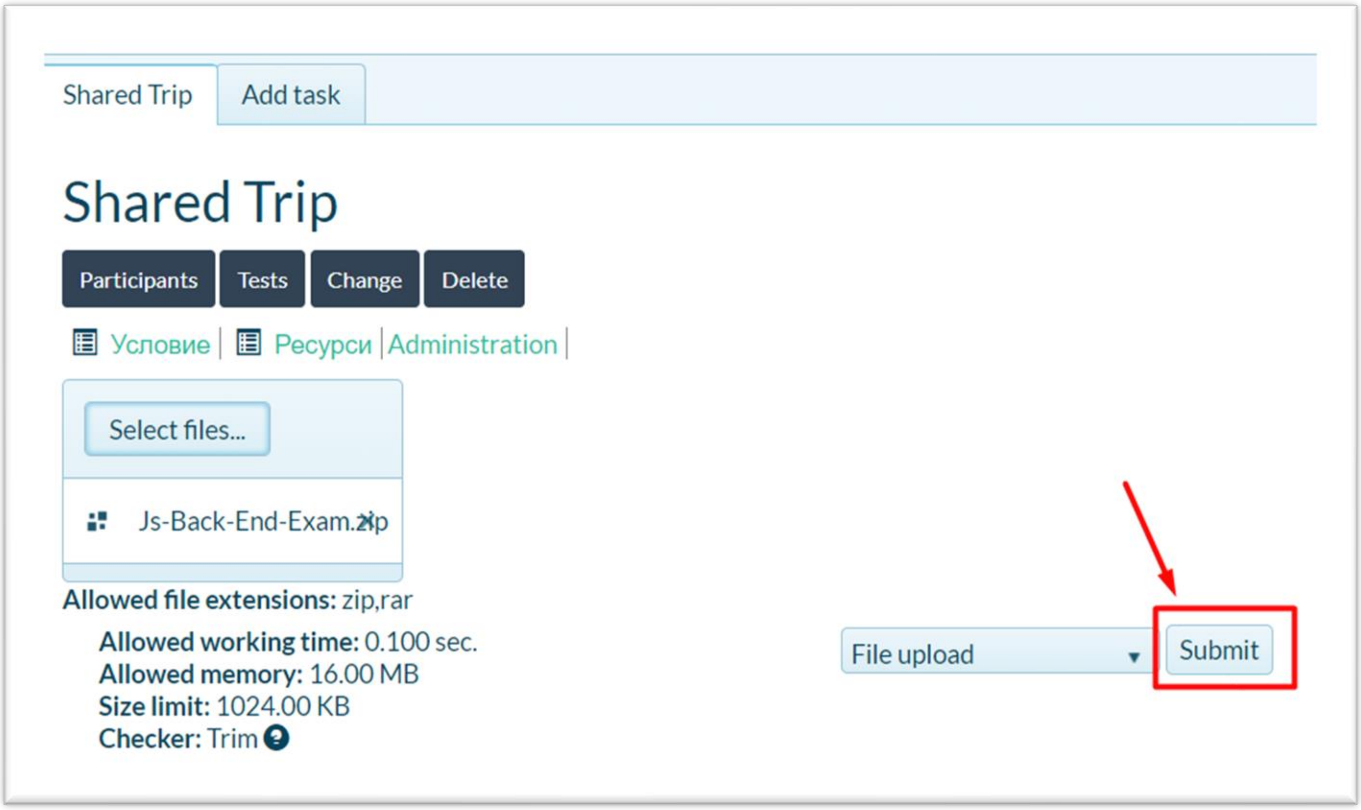
8. Submitting Your Solution

Place in a **ZIP** file in your project folder. Exclude the **`node_modules`** folder. Upload the archive to Judge.

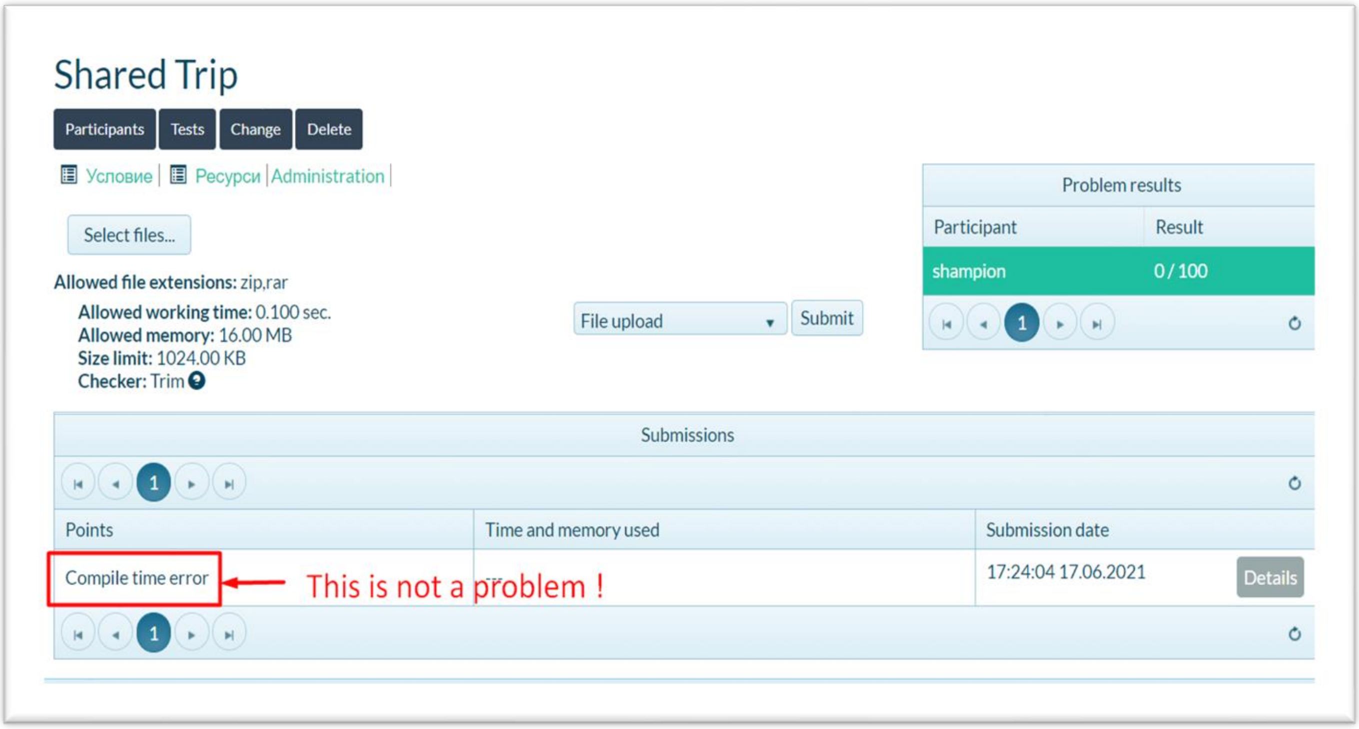




Name	Date modified	Type	Size
config	13.6.2021 г. 0:32	File folder	
controllers	16.6.2021 г. 19:28	File folder	
middlewares	16.6.2021 г. 21:03	File folder	
models	12.6.2021 г. 22:47	File folder	
node_modules	12.6.2021 г. 22:15	File folder	
routes	12.6.2021 г. 22:45	File folder	
static	12.6.2021 г. 23:50	File folder	
utils	13.6.2021 г. 0:52	File folder	
views	16.6.2021 г. 19:28	File folder	
Js-Back-End-Exam.zip	17.6.2021 г. 17:16	ZIP File	575 KB
package.json	12.6.2021 г. 22:42	JSON File	1 KB
package-lock.json	12.6.2021 г. 22:15	JSON File	44 KB
server.js	12.6.2021 г. 22:36	JavaScript File	1 KB



Allowed file extensions: zip,rar
Allowed working time: 0.100 sec.
Allowed memory: 16.00 MB
Size limit: 1024.00 KB
Checker: Trim



Shared Trip

Participants | Tests | Change | Delete

Условие | Ресурси | Administration

Select files...

Allowed file extensions: zip,rar

Allowed working time: 0.100 sec.
Allowed memory: 16.00 MB
Size limit: 1024.00 KB
Checker: Trim

File upload | Submit

Problem results

Participant	Result
shampion	0 / 100

Submissions

Points	Time and memory used	Submission date
Compile time error		17:24:04 17.06.2021

GOOD LUCK! 😋