

JS Back-End Retake Exam – Wizard Creatures Wiki

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 **creatures in wizard world**.

The visitors can **view** the **home page** and **all posts** page with available creatures. They can also **register** with an **email, first name, last name** and **password**. After registering, they will be able to create their **posts** and **voted to other's posts they are interested in** (if the **current user** is **not** the author of the post). 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 **home, all posts, login, register, and details** page.

User (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 all posts page;**
- **create a new post [Create Post];**

- access the creatures details page [Details];
- vote on a post (if the current user is not the owner of the post);
- delete or edit the post depending on the user's authentication (only for the owner of the current post).

4. Database Models

The database of the **Wizard-Creatures-Wiki** application needs to support **two entities**:

User

- firstName - string (required)
- lastName - string (required)
- email - string (required)
- password - string (required)

Creature

- name - string (required)
- species - string (required)
- skinColor - string (required)
- eyeColor - string (required)
- image - string (required)
- description - string (required)
- votes - an array of objects containing the users' ID
- owner - object ID (a reference to the User model)

Note: When a user **votes for creatures**, their **ID** is added to that collection (**voted**)

Implement the entities with the **correct data types**.

5. Application Pages (80 Pts)

Home Page (Logged-in Users and Logged-out Users)

Visualize **static home page**:

START YOUR ADVENTURE TODAY!

Everything You Need To Know About Harry Potter And The Magical World.



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Register Page (Logged-out Users)

Register a user inside the database with a **first name**, **last name**, **email**, and **password**. The **password** inside the **database** must be hashed (**use bcrypt**) and both passwords **must match**! After successful registration, the user should log in automatically **and be redirected** to the **home page**.

Sign Up

First Name:

Alex

Last Name:

Petkov

Email:

alex@gmail.com

Password:

Repeat-Password:

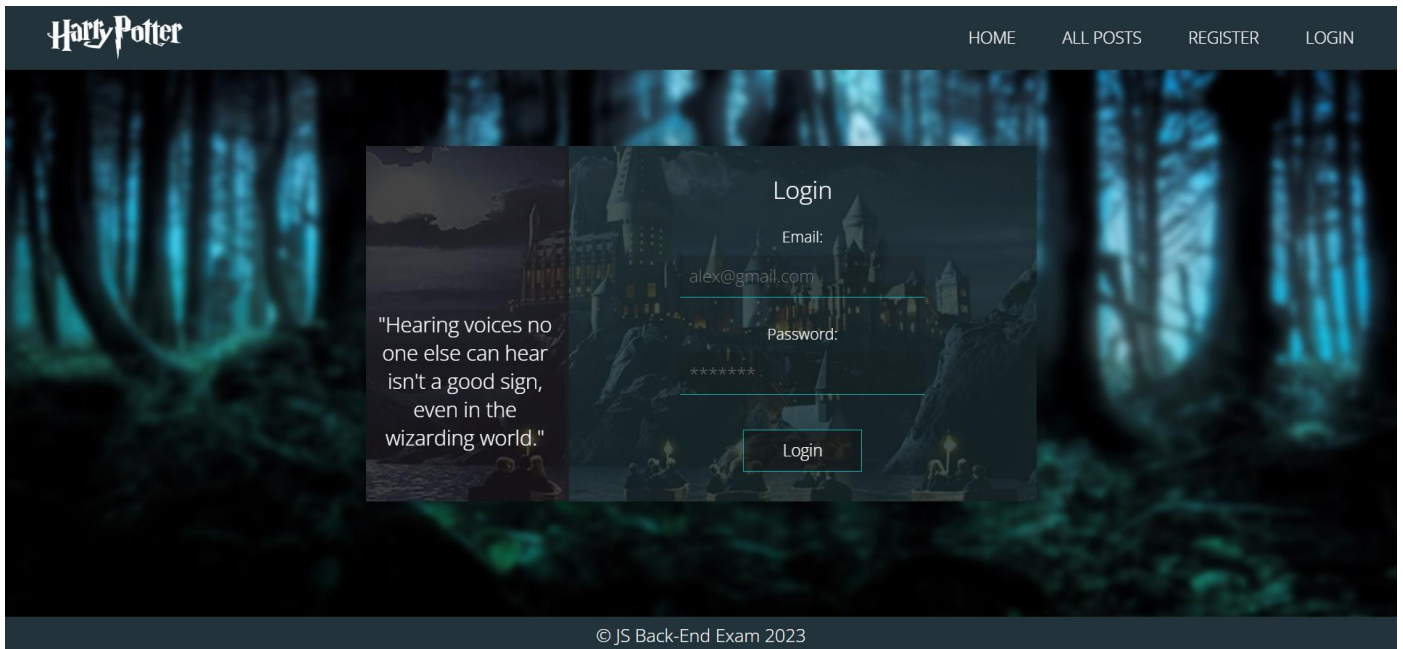
JOIN

"I hope you're pleased with yourselves. We could all have been killed — or worse, expelled. Now if you don't mind, I'm going to bed."

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Login Page (Logged-out Users)

An already registered user can log in with the correct **email** and **password**. After a successful login, you should **redirect the user to the home page**.

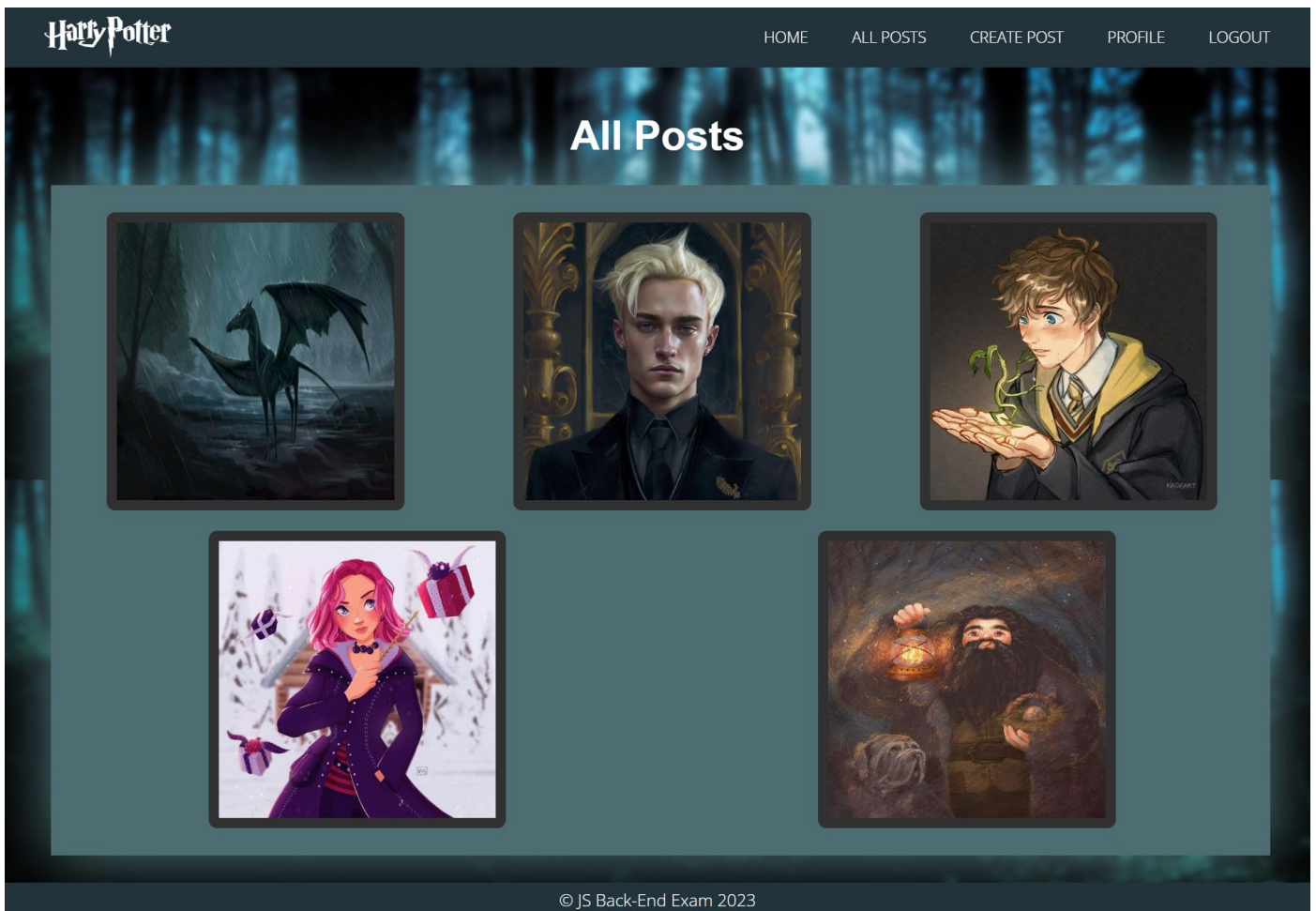


Logout (Logged-in Users)

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

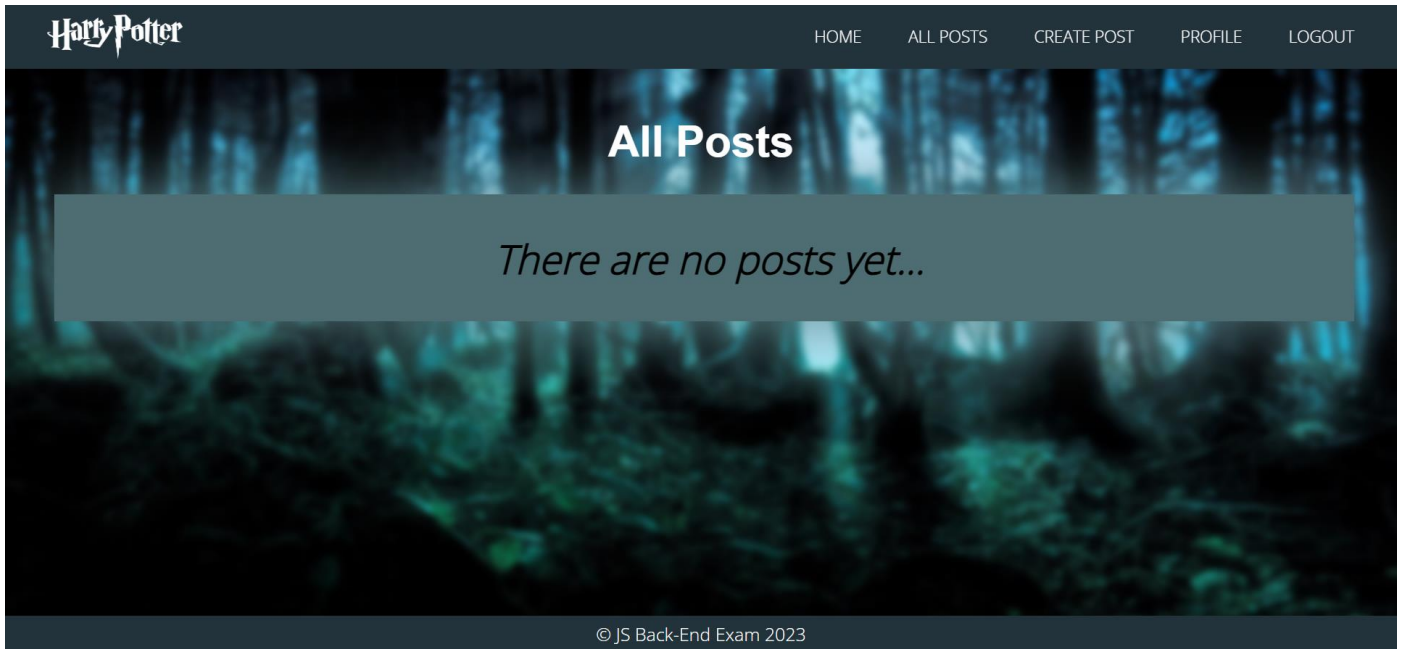
All Posts (Logged-in Users and Logged-out Users)

List of all creature posts. Each post must display information about the **creature's image, name, species, description**, and a button for **details** about the **specific creature**. As in the picture below:



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

If there are **NO** creatures in the database yet, display **"There are no posts yet..."**.



Details Page (Logged-in Users and Logged-out Users)

All users should be able to **see details**. Clicking the **[Details]** on the postcard should display the details page. If the currently registered user **is the creator** of the creature's post, the **[Edit]** and **[Delete]** buttons should be displayed. Otherwise, they **should not be available**. Information about the photo:

- **name**
- **author**
- **species**
- **skin color**
- **eye color**
- **description**
- **image**
- **buttons** (depending on the status of the currently logged in user)
- **Votes for this post**
 - Total rating of votes
 - If there are people who voted, separate their emails with **comma and space "**, "**"**
 - If not, display **"No one has voted yet"**.

Details Page (Logged-out Users)

If the user hasn't logged in, **no buttons** should be displayed.

Name: Newt Scamander

Created by an author: Peter Petkov

Species: Human

Skin colour: White

Eye Colour: Green

Description: Newt Scamander is an English wizard. Early in life, Scamander developed an interest in magical creatures, influenced by his mother's breeding of Hippogriffs. He attended Hogwarts School of Witchcraft and Wizardry, where he was sorted into Hufflepuff House. He became heavily involved in the global wizarding war, where he bonded with Porpentina Goldstein and defied Gellert Grindelwald on three different occasions.



Votes

Total rating of votes: 0

People who voted for the post - No one has voted yet.

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Details Page (Logged-in User and Creator of the Current Animal Post)

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

Name: Newt Scamander

Created by an author: Peter Petkov

Species: Human

Skin colour: White

Eye Colour: Green

Description: Newt Scamander is an English wizard. Early in life, Scamander developed an interest in magical creatures, influenced by his mother's breeding of Hippogriffs. He attended Hogwarts School of Witchcraft and Wizardry, where he was sorted into Hufflepuff House. He became heavily involved in the global wizarding war, where he bonded with Porpentina Goldstein and defied Gellert Grindelwald on three different occasions.

Edit

Delete



Votes

Total rating of votes: 0

People who voted for the post - No one has voted yet.

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Details Page (Logged-in User Who is Not the Current Post Owner)

If the currently logged-in user is **not the owner** (the creator of this post), he/she should see **the vote button**.

Name: Newt Scamander

Created by an author: Peter Petkov

Species: Human

Skin colour: White

Eye Colour: Green

Description: Newt Scamander is an English wizard. Early in life, Scamander developed an interest in magical creatures, influenced by his mother's breeding of Hippogriffs. He attended Hogwarts School of Witchcraft and Wizardry, where he was sorted into Hufflepuff House. He became heavily involved in the global wizarding war, where he bonded with Porpentina Goldstein and defied Gellert Grindelwald on three different occasions.

Vote



Votes

Total rating of votes: 0

People who voted for the post - No one has voted yet.

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Vote (Logged-in User Who is Not the Current Post Owner)

Any registered user who is **not** the **owner** of the current post should be able **to vote**.

When he or she **click on [Vote]**, his/her **user ID** should be added to the **"voted"** collection the post and the user should be **redirected** to the **details** page for the current **creature post**.

In the list- **People who voted for the post**, the **emails** of the people who voted must be displayed.

If a user has once voted on the post, he should see **"Thanks For Voting"** and in the list- **People who voted for the post**, his email should be displayed.

Name: Newt Scamander

Created by an author: Peter Petkov

Species: Human

Skin colour: White

Eye Colour: Green

Description: Newt Scamander is an English wizard. Early in life, Scamander developed an interest in magical creatures, influenced by his mother's breeding of Hippogriffs. He attended Hogwarts School of Witchcraft and Wizardry, where he was sorted into Hufflepuff House. He became heavily involved in the global wizarding war, where he bonded with Porpentina Goldstein and defied Gellert Grindelwald on three different occasions.

Thanks For Voting



Votes

Total rating of votes: 1

People who voted for the post - john@abv.bg

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Add Creature (Logged-in User)

The **create** page is available to **logged-in users**. It contains a form for adding a new creature post. Upon success, **redirect** the user to the **all-posts** page.

Harry Potter

HOMEALL POSTSCREATE POSTPROFILELOGOUT

"Dobby Never Meant To Kill! Dobby Only Meant to Maim, or Seriously Injure."

Create Post

Name:

Delphini

Species:

Human

Skin Colour:

Black

Eye Colour:

Black

Creature Image:

http/...

Description:

Creature...

Create

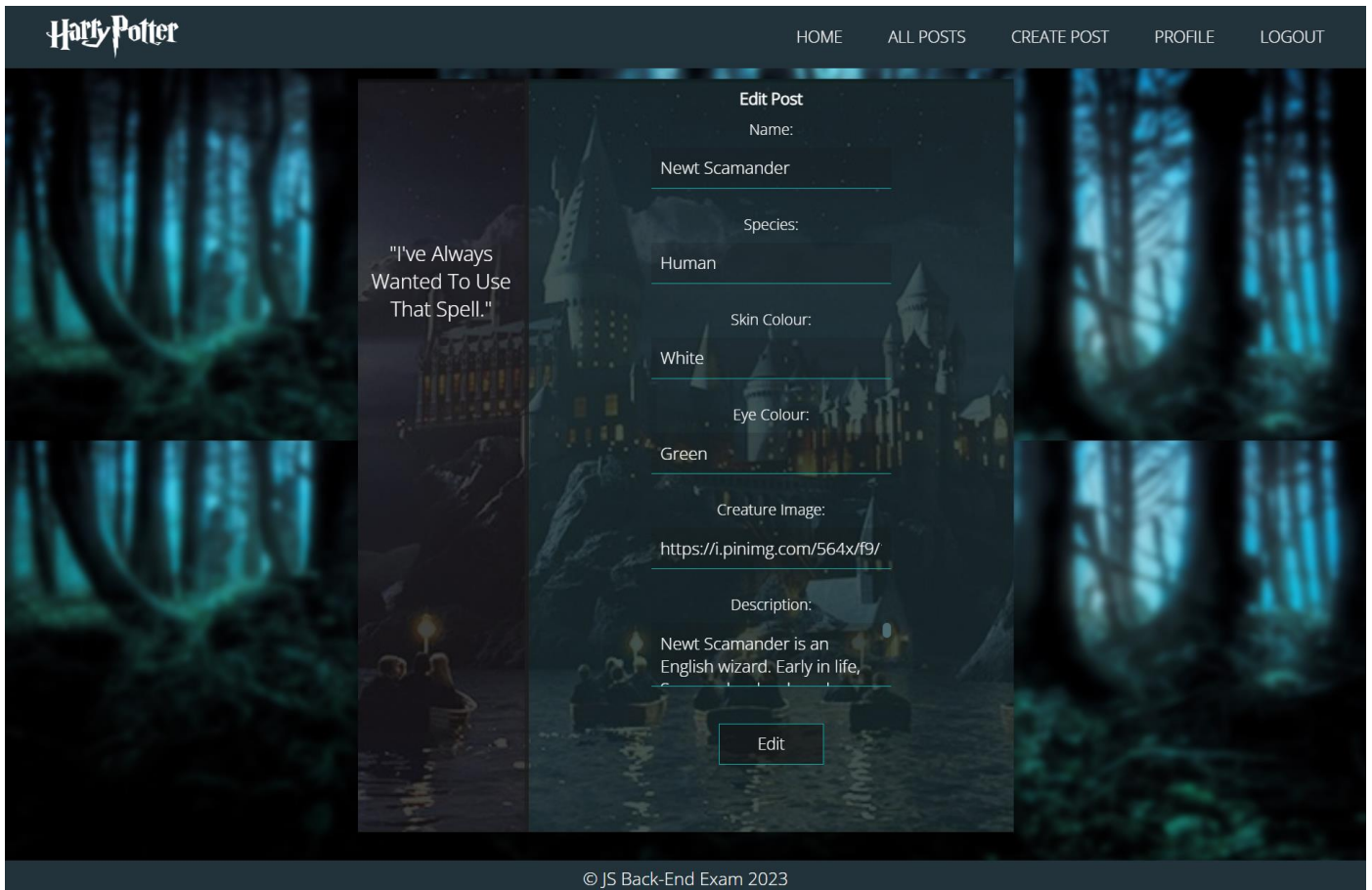
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Delete Creature (Logged-in User and Owner of the Current Post)

Each creature post **owner** should be able to click on the **[Delete]** button and **delete the current post** from the database. After that, they should be redirected to the **all-posts** page.

Edit Creature (Logged-in User and Owner of the Current Post)

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



6. Security Requirements / Routes Guards (10 Pts)

The **security requirements** are mainly **access** requirements, i.e., configurations specifying 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 **all posts** (a list of all creature posts).
- **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 creature post owners) can **voted for post**.
 - **Users** (creature post owners) can **edit** and **delete** their creature posts.
- **Users** (logged-in) can access the **profile** page and functionality.
- **Users** (logged-in) can access the **create post** page and functionality.
- **Users** (logged-in) can access the **logout** functionality.

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



404

The page is not found like
Voldemort's nose!

[Go Back to HOME](#)

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7. Validation and Error Handling (10 Pts)

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

In case of an error, you should display a `<div>` with the class "**error-container**".

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 **first name** is required and should be **at least 3 characters** long.
- The **last name** is required and should be **at least 3 characters** long.
- The **email** is required and should be **at least 10 characters** long.
- The **password** is required and should be **at least 4 characters** long.
- The **repeat password** is required and should be **equal to the password**.

"I hope you're pleased with yourselves. We could all have been killed — or worse, expelled. Now if you don't mind, I'm going to bed."

Sign Up

First Name:

Alex

Last Name:

Petkov

Email:

alex@gmail.com

Password:

Repeat-Password:

JOIN

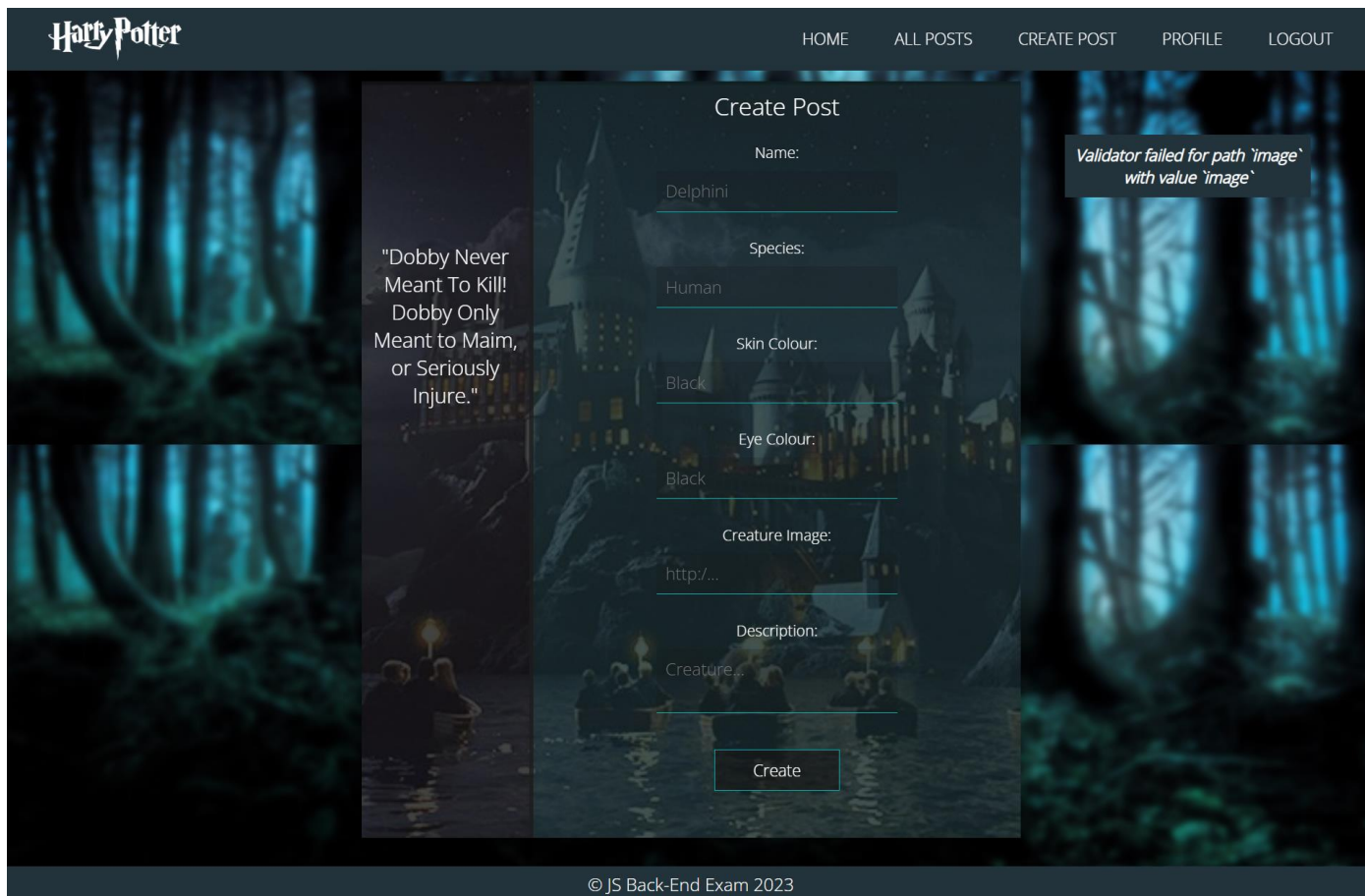
Passwords do not match!

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Animals

You should make the following validations while **creating** or **editing** an animal post:

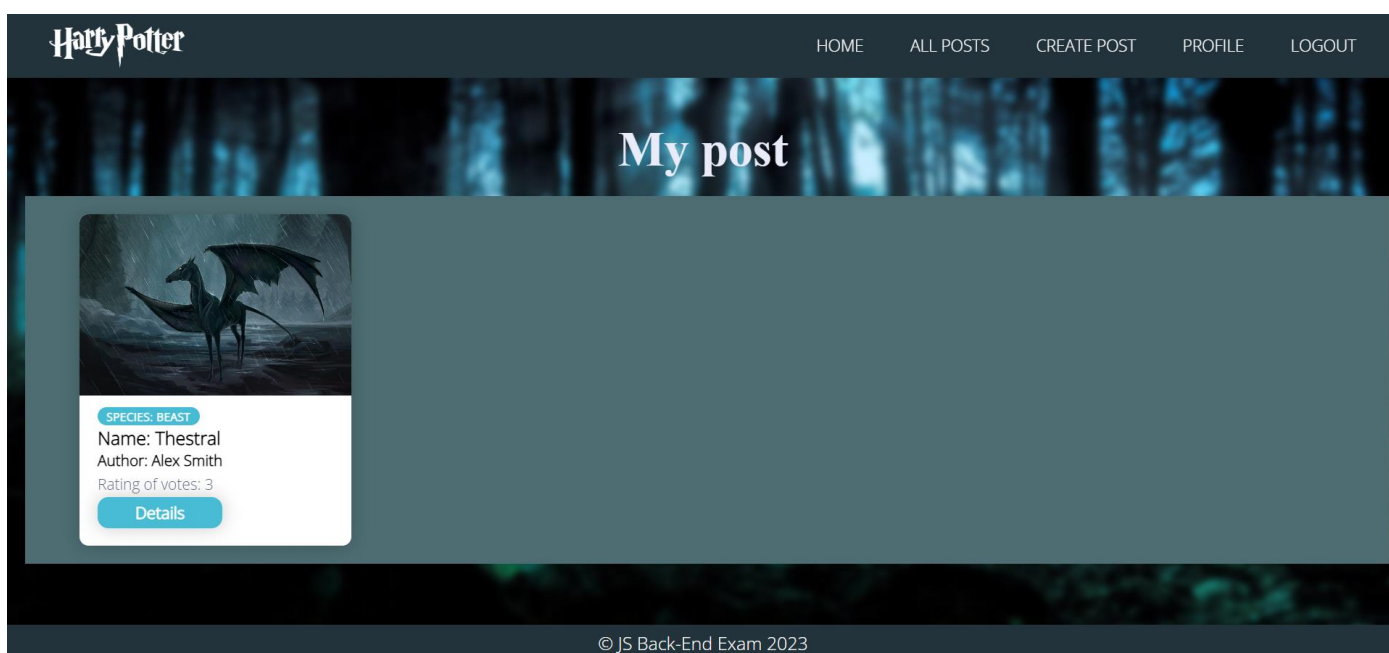
- The **name** is required and should be **at least 2 characters**.
- The **species** is required and should be **at least 3 characters**.
- The **creature image** is required and should start with **http://** or **https://**
- The **skin color** is required and should be **at least 3 characters**.
- The **eye color** is required and should be **a at least 3 characters**.
- The **description** is required and should be **at least 5 and no longer than 500 characters**.



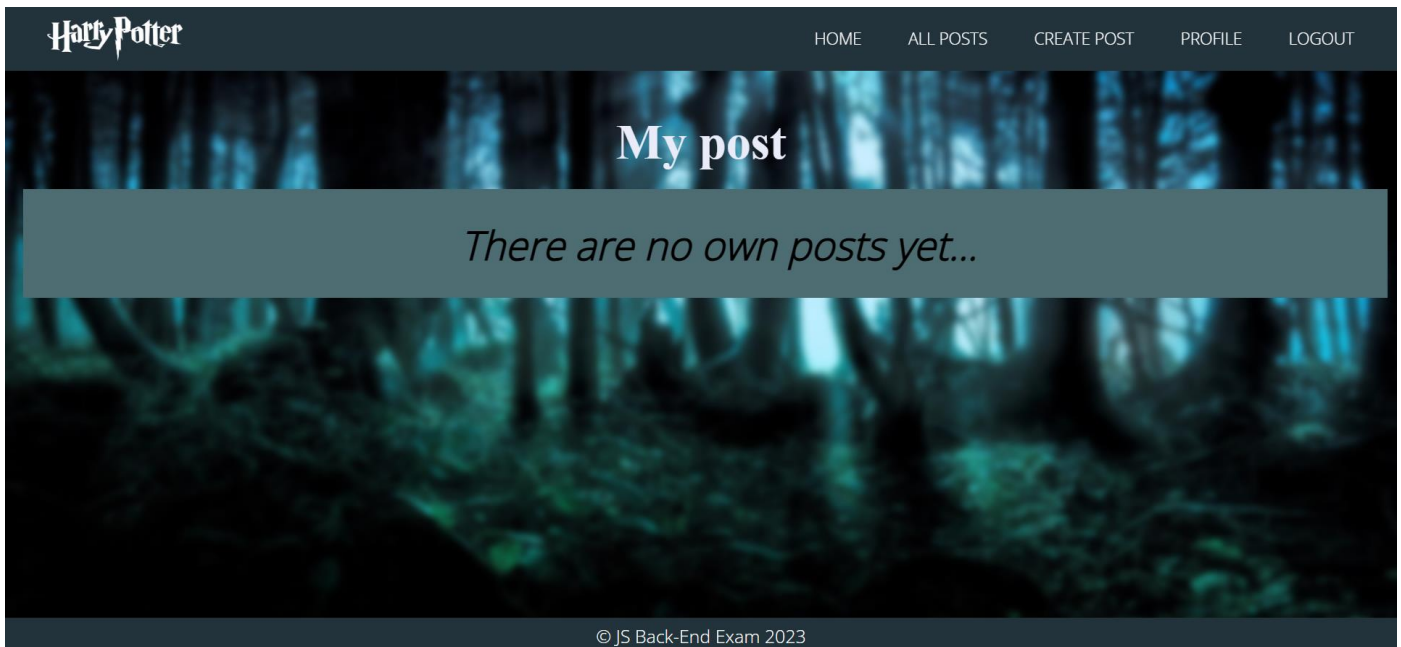
8. * Bonus – Profile (10 Pts)

Each **logged-in user** should be able to view their profile information by clicking [**Profile**].

Each post must display information about the **creature's image, name, species, author, rating of votes**, and a button for **details** about the **specific creature**. As in the picture below:



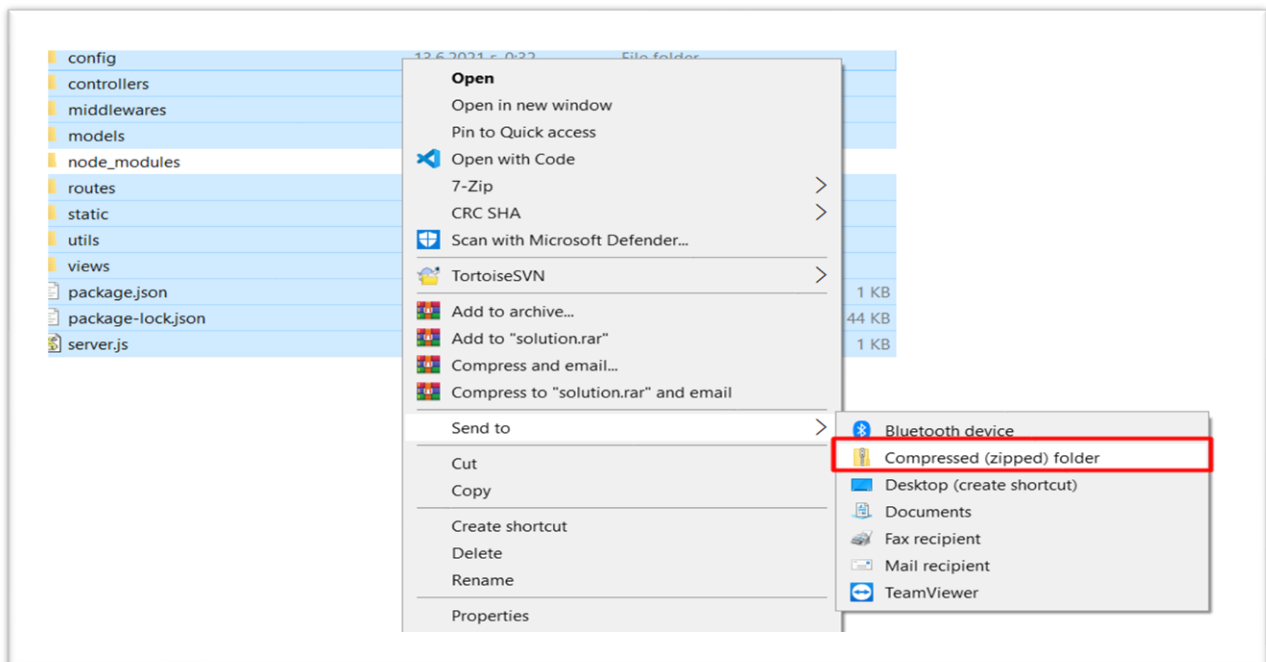
If there are **no** posts, display:



9. Submitting Your Solution

Select all files and folders in your project folder. Exclude the ***node_modules*** folder. Compress the selected files and folders into a **zipped archive folder**. Upload the archive in the softuni learning system:

<https://softuni.bg/trainings/4111/js-back-end-may-2023#lesson-54980>



GOOD LUCK! 😊