JS Back-End Exam – Petstagram

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

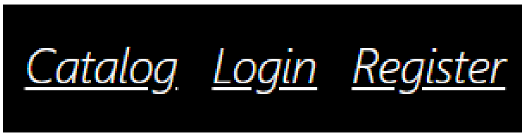
Get acquainted with the provided **HTML and CSS** and create an application for sharing **pet photos**.

The visitors can **view** the **home page** and **catalog** page with available photos. They can also **register** with a **username** and **password**. After registering, they will be able to create their **photo posts** and **comment on photo posts they are interested in** (if the **current user** is **not** the author of the photo). Authors can edit or delete posts at any time.

3. Functional Requirements

Guest (Not Logged-in)

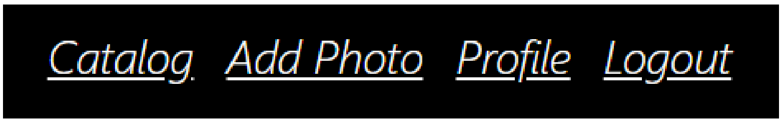
Guest navigation example:



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.

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 catalog page;**
- **create a new photo post [Add Photo];**
- **access the photo details page [See Details];**
- **comment on a photo post** (if the **current user** is **not** the **owner of the photo);**
- **delete or edit the photo depending on the user's authentication (only for the owner of the current blog).**

4. Database Models

The **database** of the **Petstagram** application needs to support **two entities**:

User

- `username - string (required)`
- `email - string (required)`
- `password - string (required)`

Photo

- **name – string (required)**
- **image – string (required)**
- **age – number (required)**
- **description – string (required)**
- **location – string (required)**
- **commentList – an array of objects containing the user's ID and the comment content: [{ userID: '1234', comment: 'Nice photo!'}]**
- **owner – object ID (a reference to the User model)**

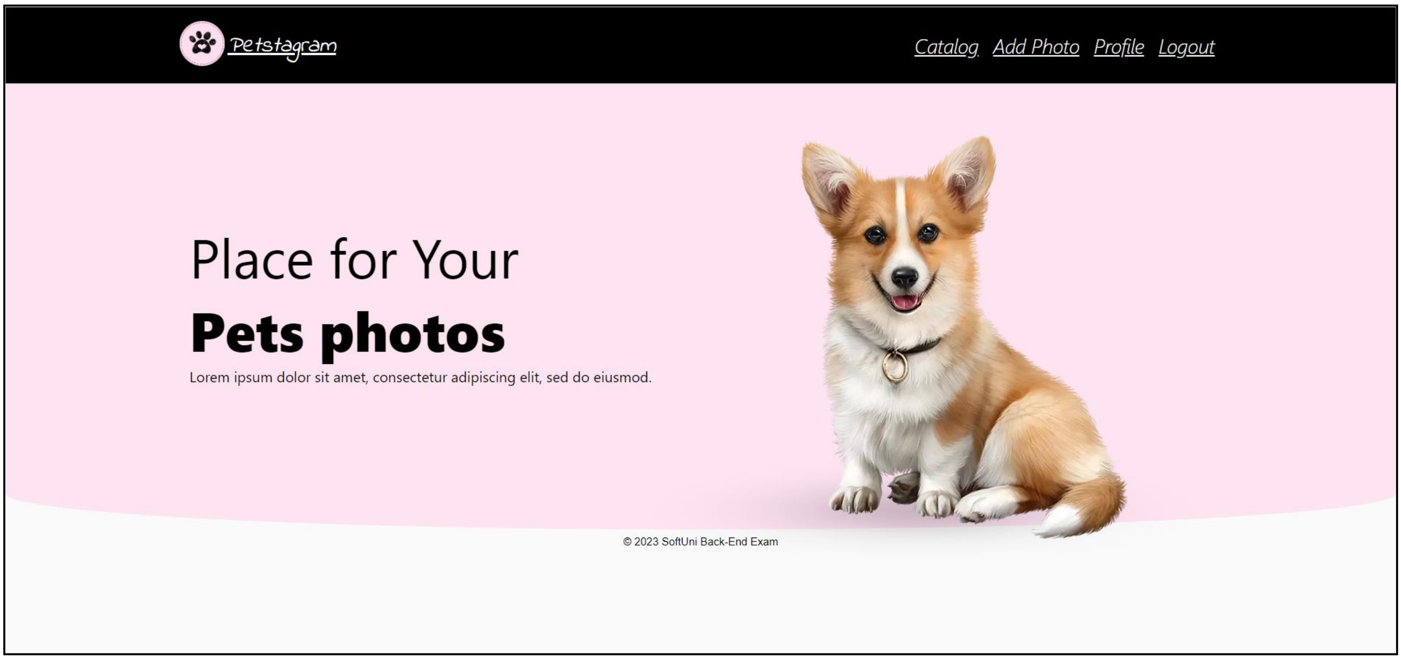
Note: When a user **comments a photo**, their **ID** is added to that collection (**commentList**)

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:**



Place for Your

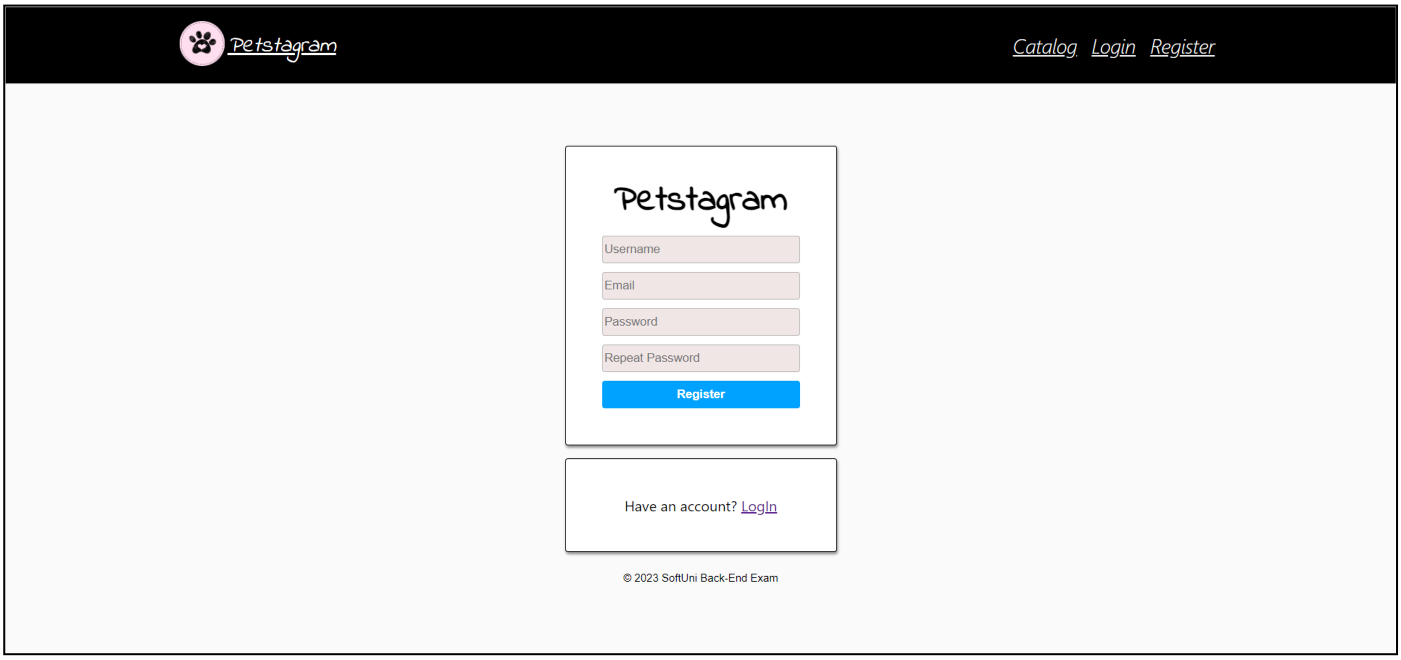
Pets photos

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod.

© 2023 SoftUni Back-End Exam

Register Page (Logged-out Users)

Register a user inside the database with a **username, 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**.

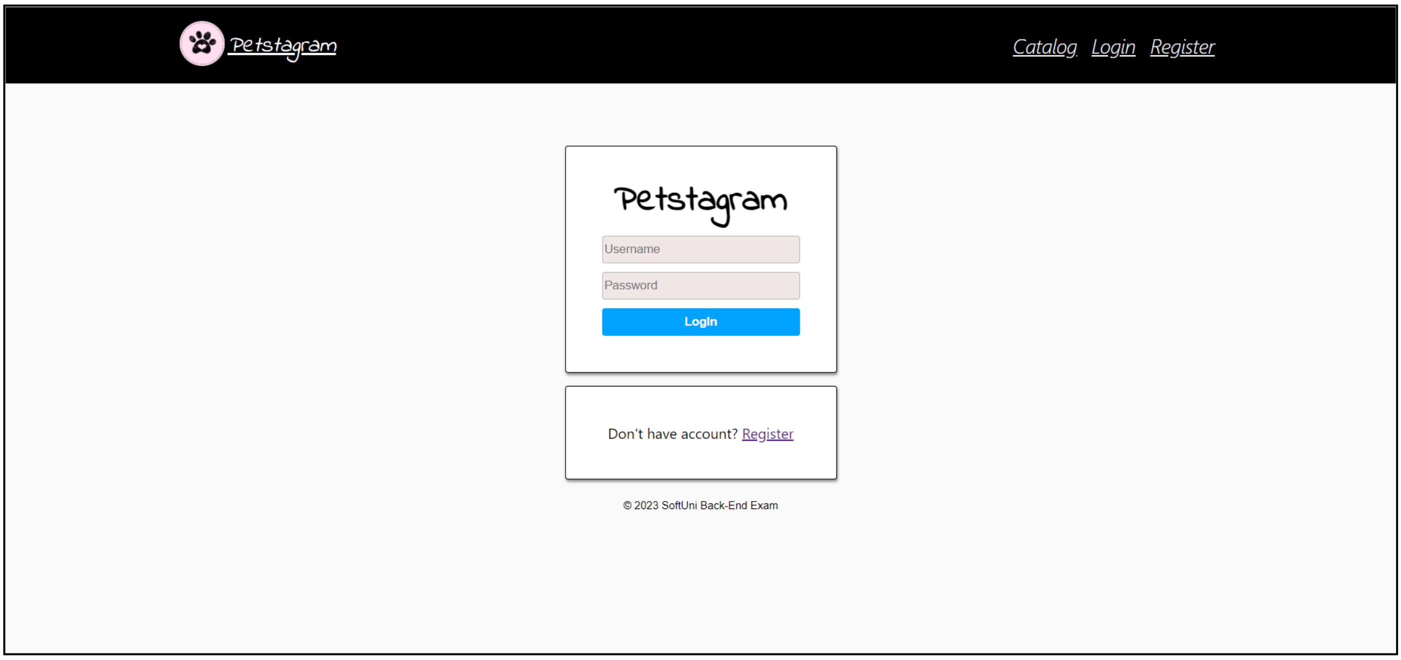


Have an account? LogIn

© 2023 SoftUni Back-End Exam

Login Page (Logged-out Users)

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



Don't have account? Register

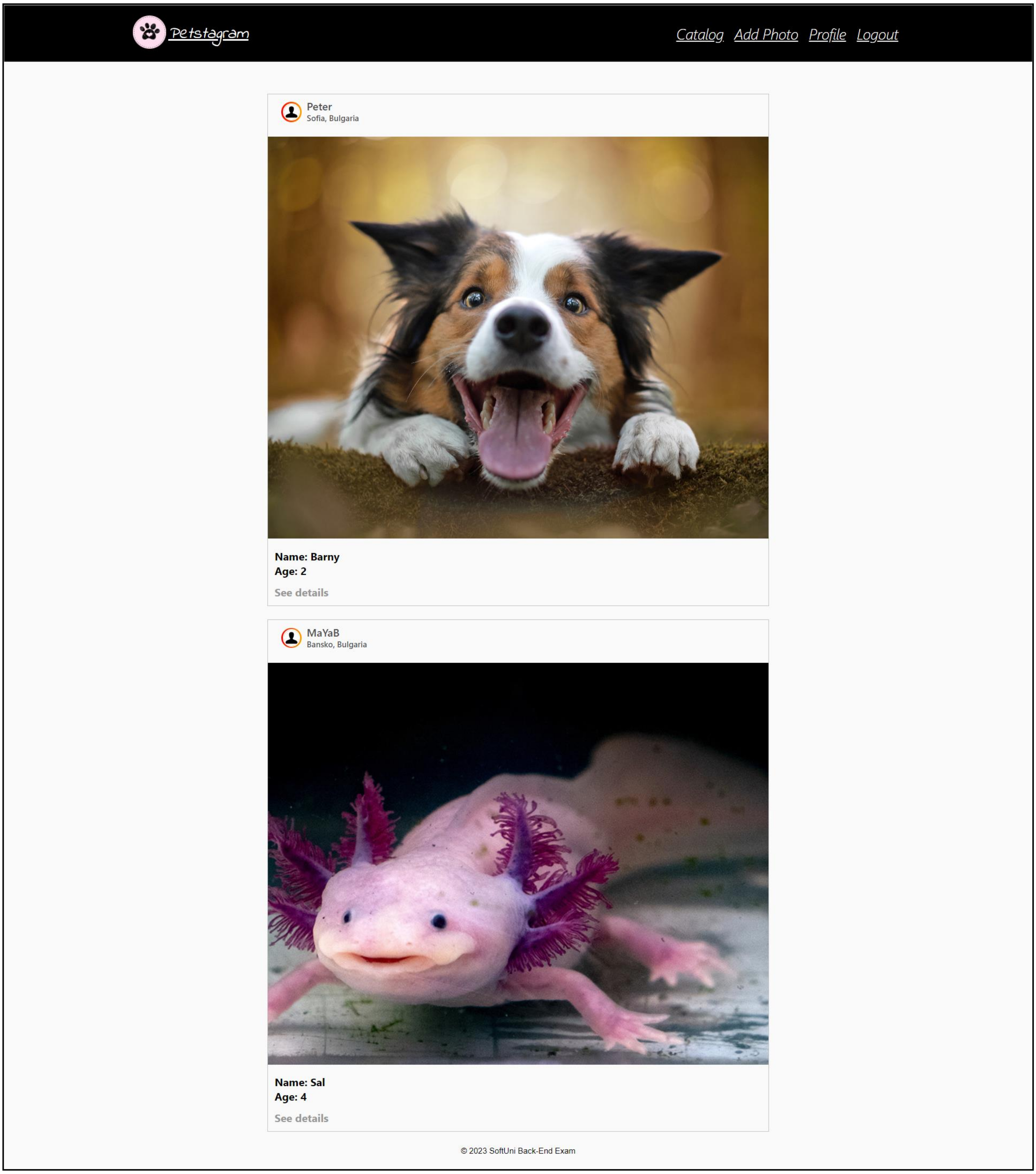
© 2023 SoftUni Back-End Exam

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.

Catalog (Logged-in Users and Logged-out Users)

List of all photo posts. Each post must display information about the **pet image**, the **name**, the **age,** the **location,** the owner's **username**, and a button for **details** about the **specific photo**. As in the picture below:



Peter
Sofia, Bulgaria

Name: Barny
Age: 2
See details

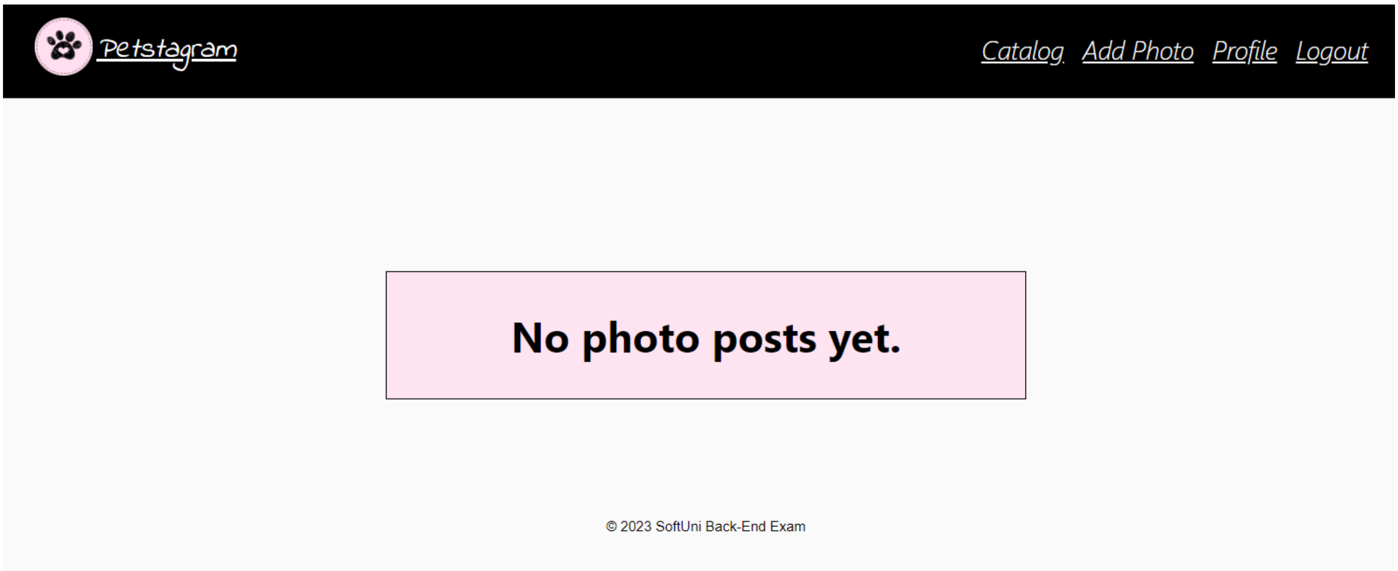
MaYaB
Bansko, Bulgaria

Name: Sal
Age: 4
See details

© 2023 SoftUni Back-End Exam

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

If there are **NO** photos in the database yet, display **`"No photo posts yet."`**.



No photo posts yet.

© 2023 SoftUni Back-End Exam

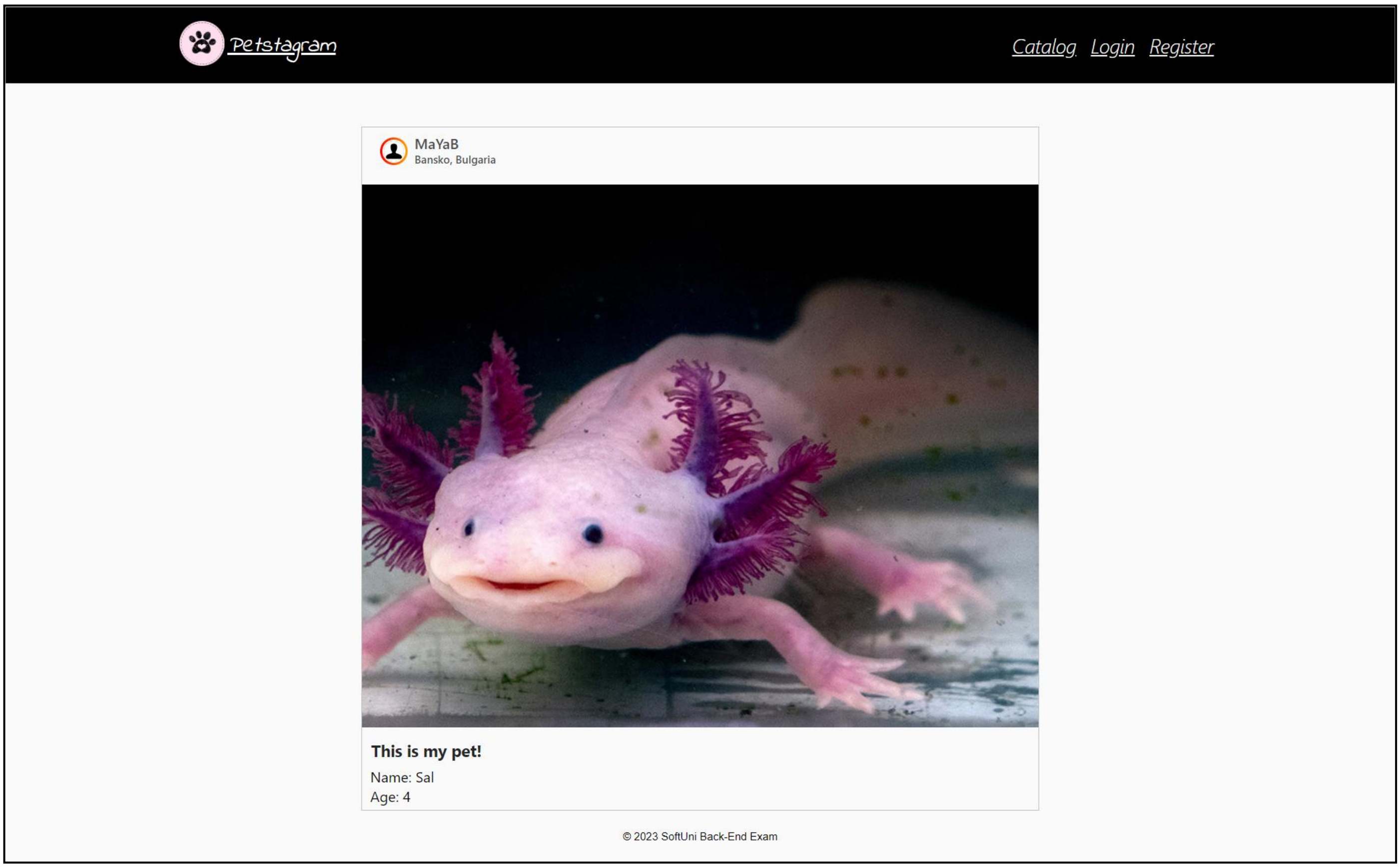
Details Page (Logged-in Users and Logged-out Users)

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

- **username of the creator**
- **name**
- **age**
- **description**
- **location**
- **comments:**
- **buttons** (depending on the status of the currently logged in user)

Details Page (Logged-out Users)

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



MaYaB
Bansko, Bulgaria

This is my pet!

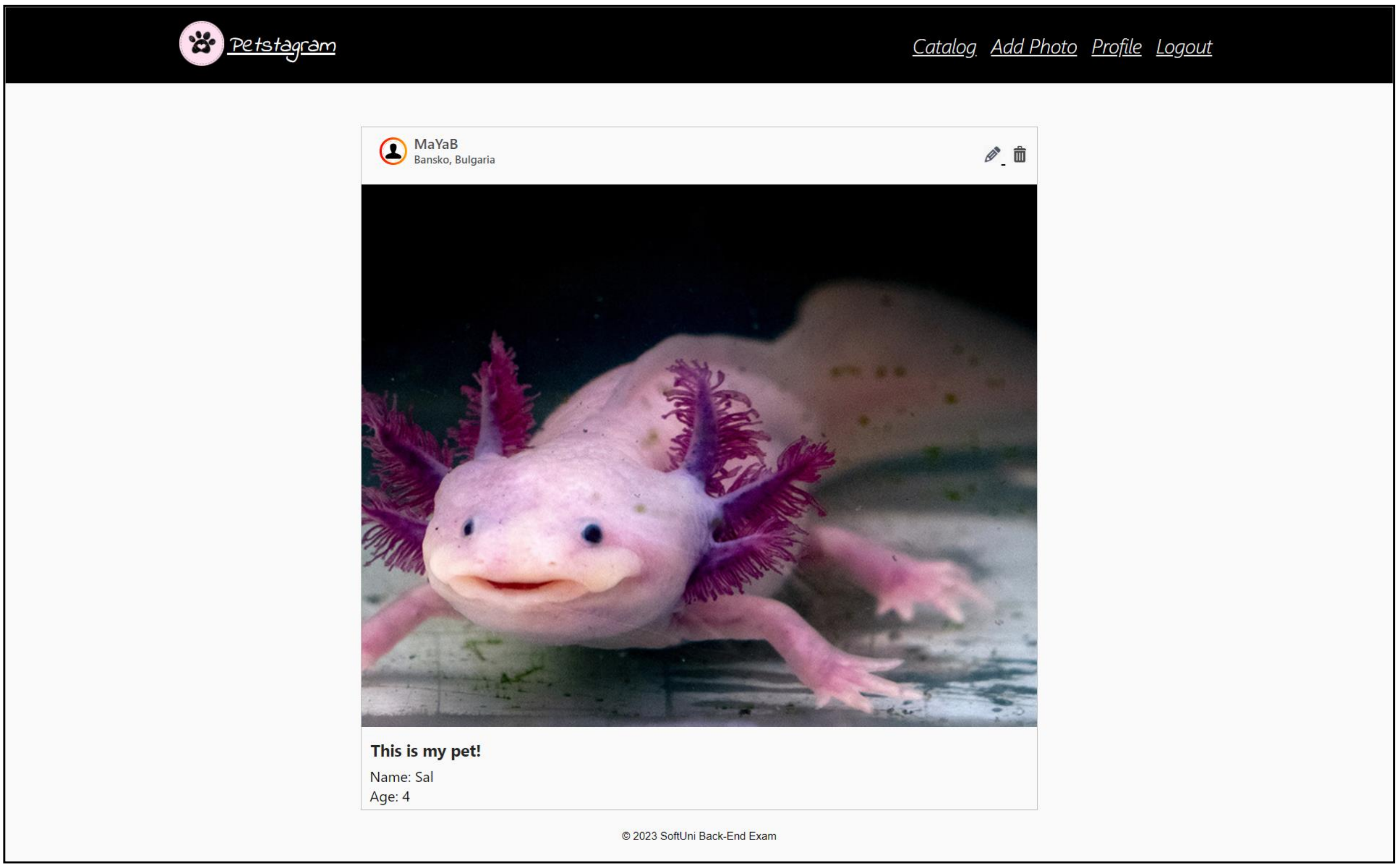
Name: Sal

Age: 4

© 2023 SoftUni Back-End Exam

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

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



MaYaB
Bansko, Bulgaria

This is my pet!

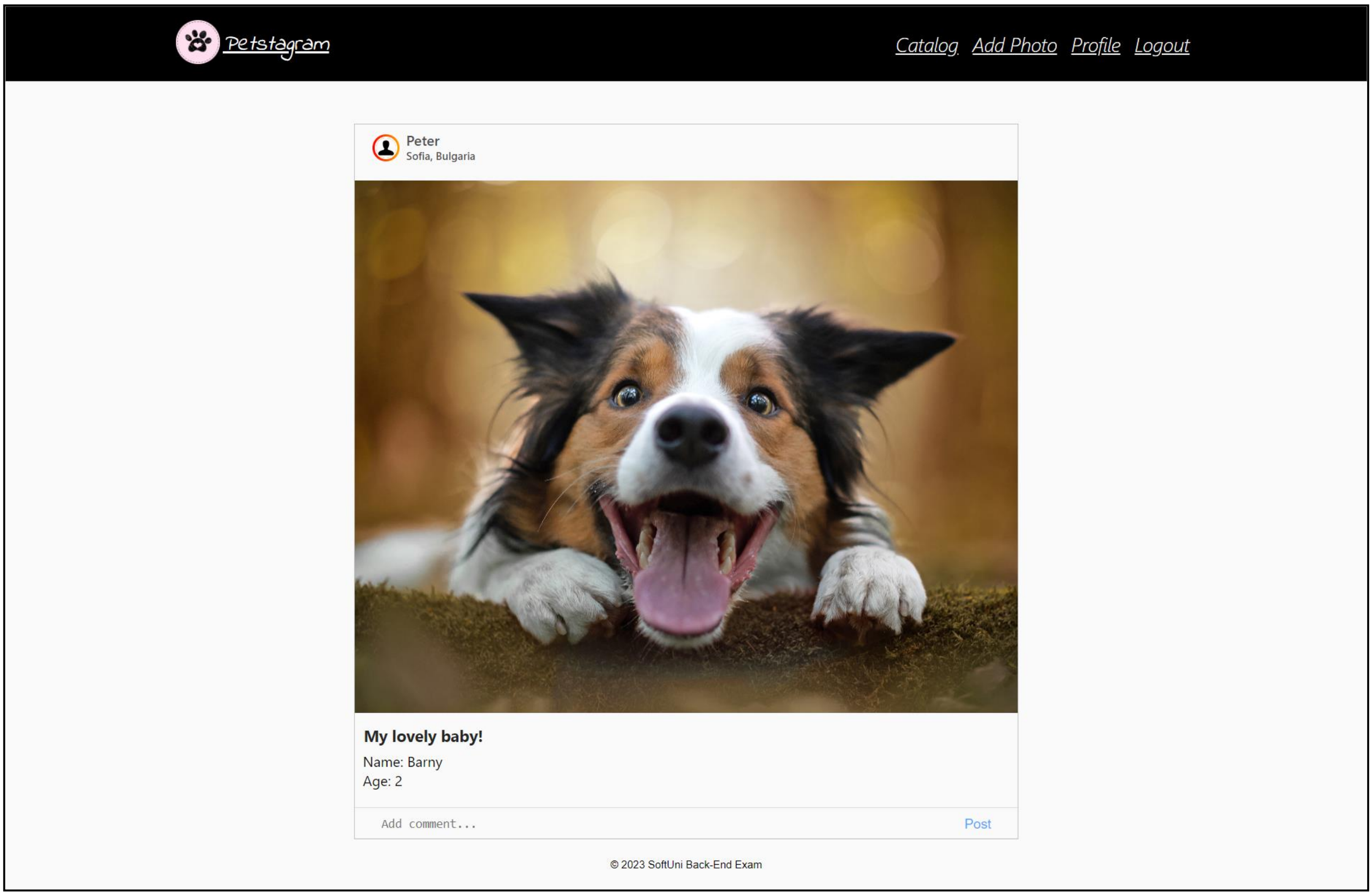
Name: Sal

Age: 4

© 2023 SoftUni Back-End Exam

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

If the currently logged-in user is **not the owner** (the creator of this photo post), they should see a **comment** text area.



My lovely baby!

Name: Barny

Age: 2

Add comment...

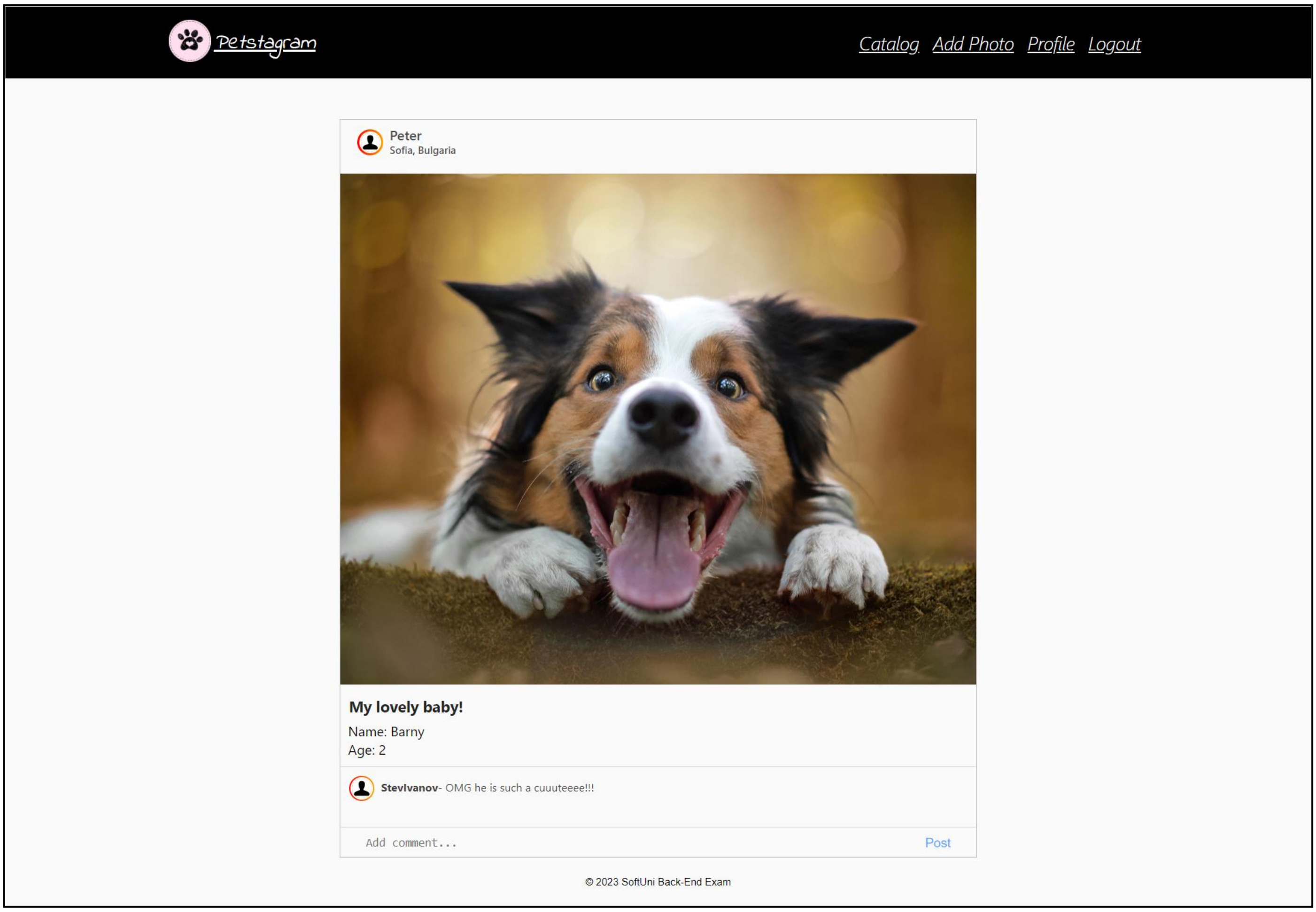
© 2023 SoftUni Back-End Exam

Comment (Logged-in User Who is Not the Current Photo Owner)

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

When they **click on [Post]**, their **user ID** and **comment** should be added to the **commentList** collection of the photo and the user should be **redirected** to the **details** page for the current **photo post**.

Every logged-in user who is not the current photo owner can comment as many times as they want.



Peter
Sofia, Bulgaria

My lovely baby!

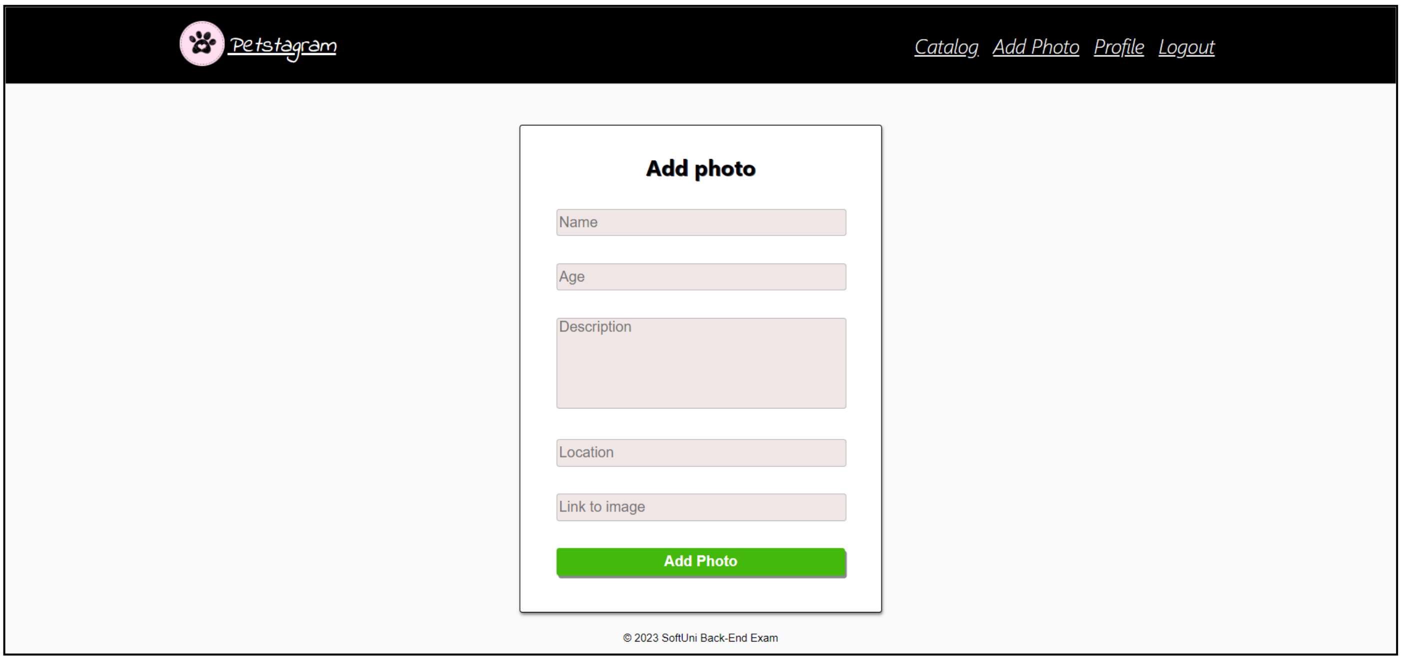
Name: Barny
Age: 2

StevIvanov- OMG he is such a cuuuteeee!!!

© 2023 SoftUni Back-End Exam

Add Photo (Logged-in User)

The **add** page is available to **logged-in users**. It contains a form for adding a new photo post. Upon success, **redirect** the user to the **catalog** page.



Add photo

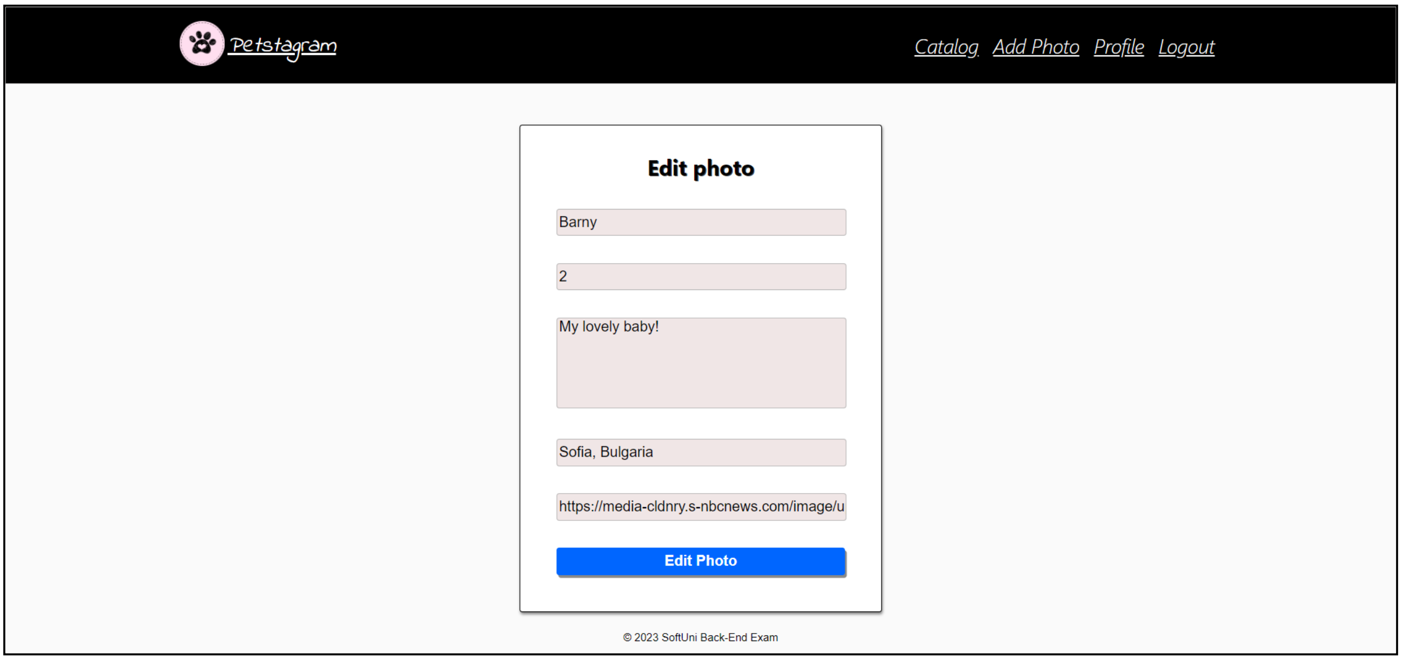
© 2023 SoftUni Back-End Exam

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

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

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

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



Edit photo

Barny

2

My lovely baby!

Sofia, Bulgaria

https://media-cldnry.s-nbcnews.com/image/u

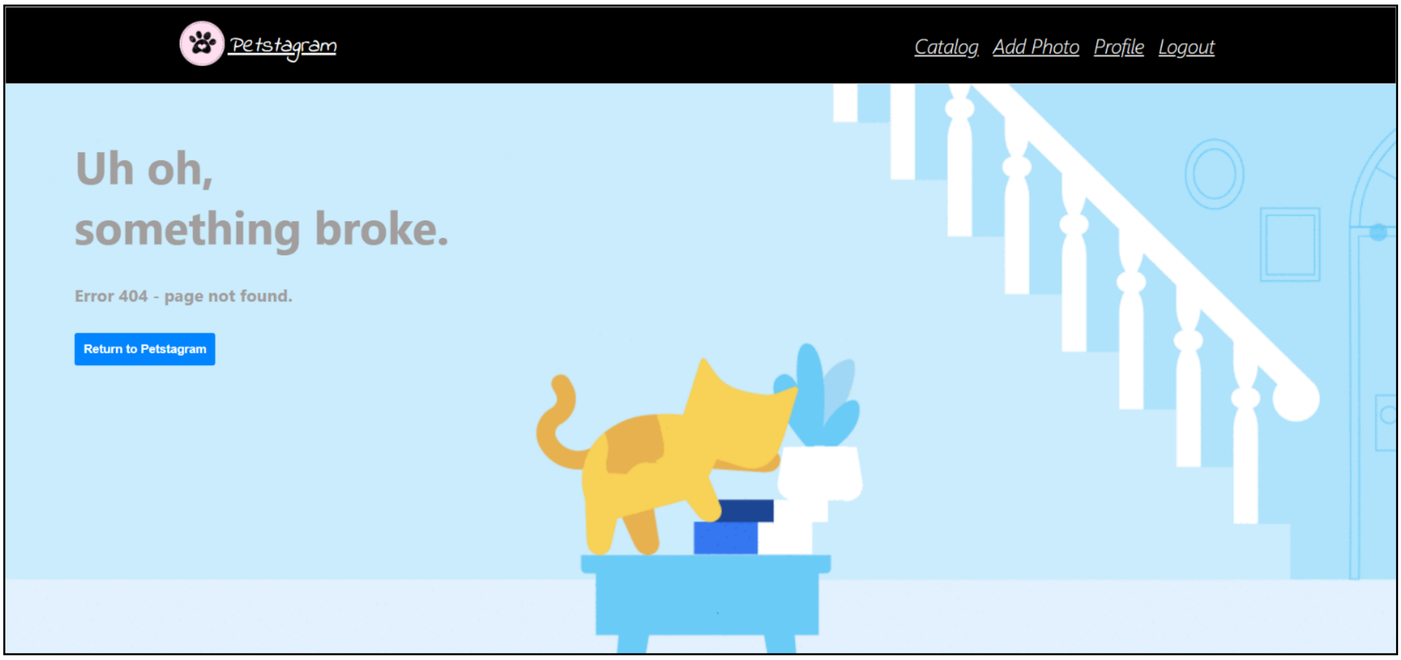
© 2023 SoftUni Back-End Exam

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 **catalog `(a list of all photo 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 photo post owners) can **comment on photos**.
  - **`Users`** (photo post owners) can **`edit`** and **`delete`** their photo posts.
- **`Users`** (logged-in) can access the **`profile`** page and functionality.
- **`Users`** (logged-in) can access the **`add photo`** page and functionality.
- **`Users`** (logged-in) can access the **`logout`** functionality.

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



Uh oh,
something broke.

Error 404 - page not found.

7. Validation and Error Handling (10 Pts)

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

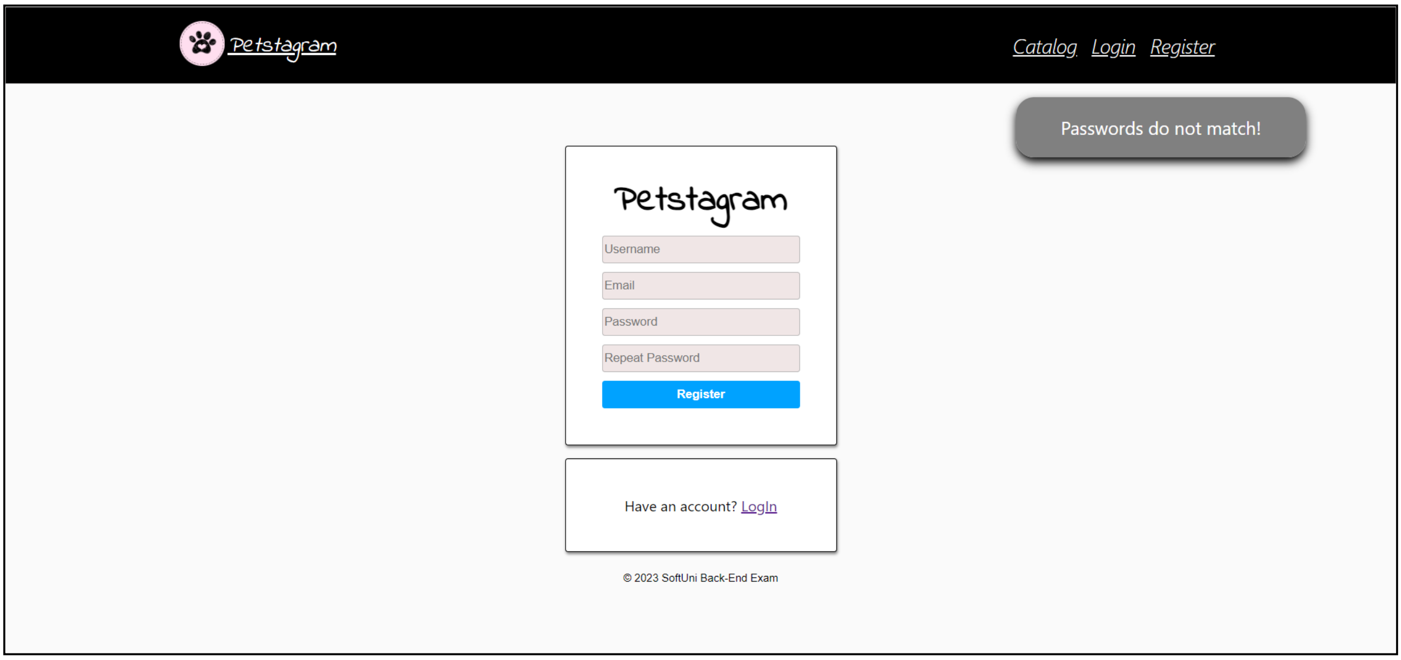
In case of an error, you should display a <div> with the class "**errorContainer**".

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:

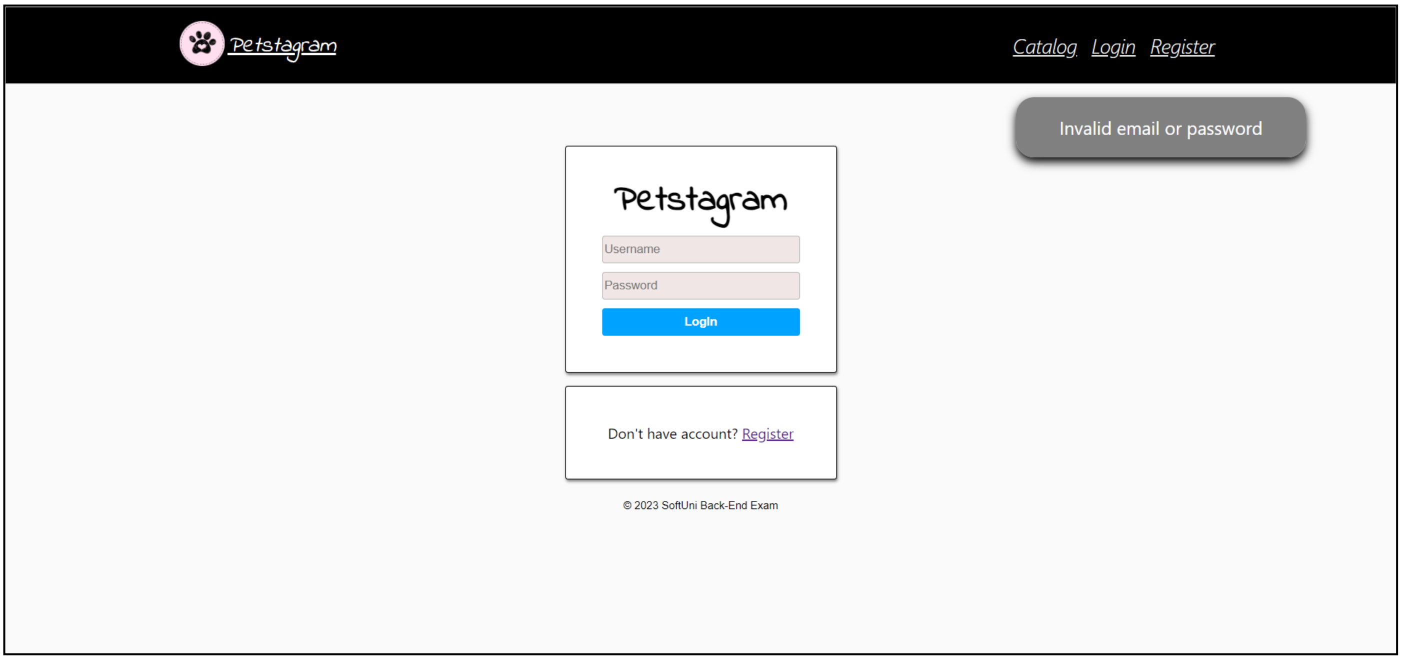
- The **username** is required and should be **at least 2 characters** long.
- The **email** is required and should be **at least 10 characters** long.
- The **password** is required and should be **at least 4 characters** long.
- The **repeat password** is required and should be **equal to the password**.



Passwords do not match!

Have an account? LogIn

© 2023 SoftUni Back-End Exam



Invalid email or password

Petstagram

Username

Password

Login

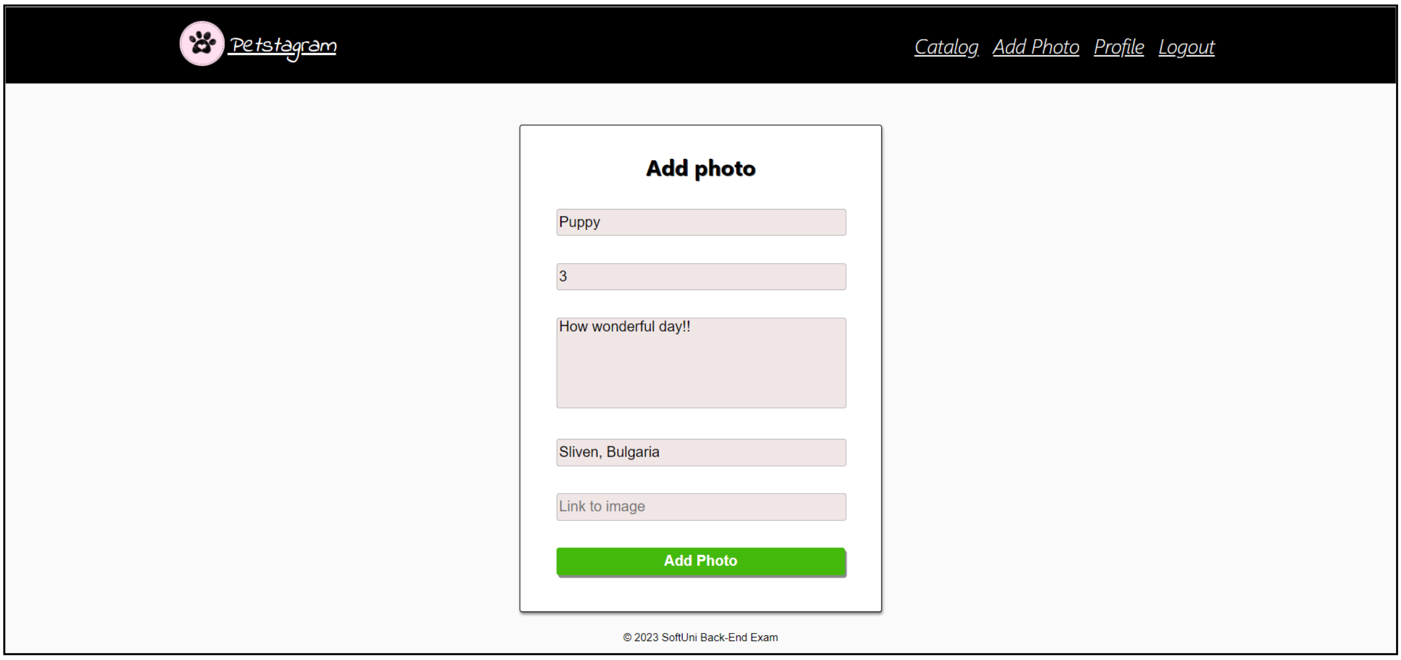
Don't have account? Register

© 2023 SoftUni Back-End Exam

Photo

You should make the following validations while **creating** or **editing a photo post**:

- The **name** is required and should be **at least 2 characters**.
- The **photo image** is required and should start with **http:// or https://**
- The **age** is required and should be at least **1 and no longer than 100 characters**.
- The **description** is required and should be at least **5 and no longer than 50 characters**.
- The **location** is required and should be at least **5 and no longer than 50 characters**.



Add photo

Puppy

3

How wonderful day!!

Sliven, Bulgaria

Link to image

Add Photo

© 2023 SoftUni Back-End Exam

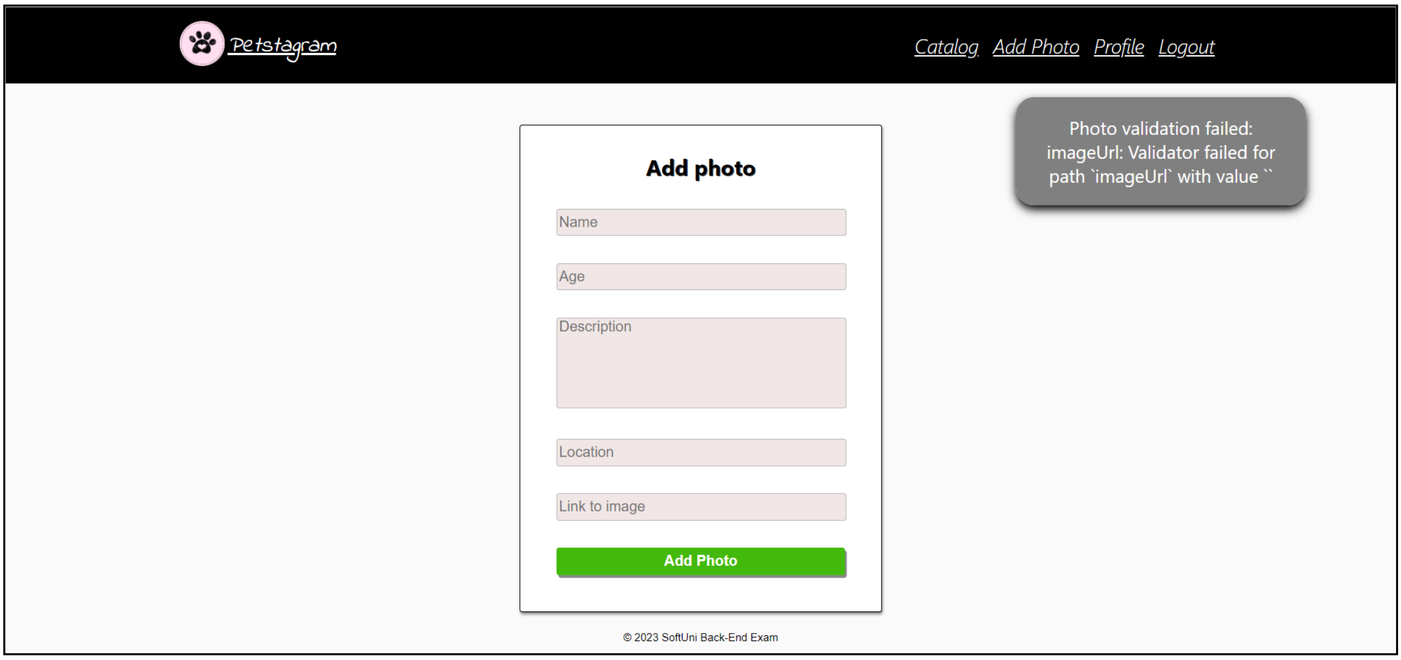
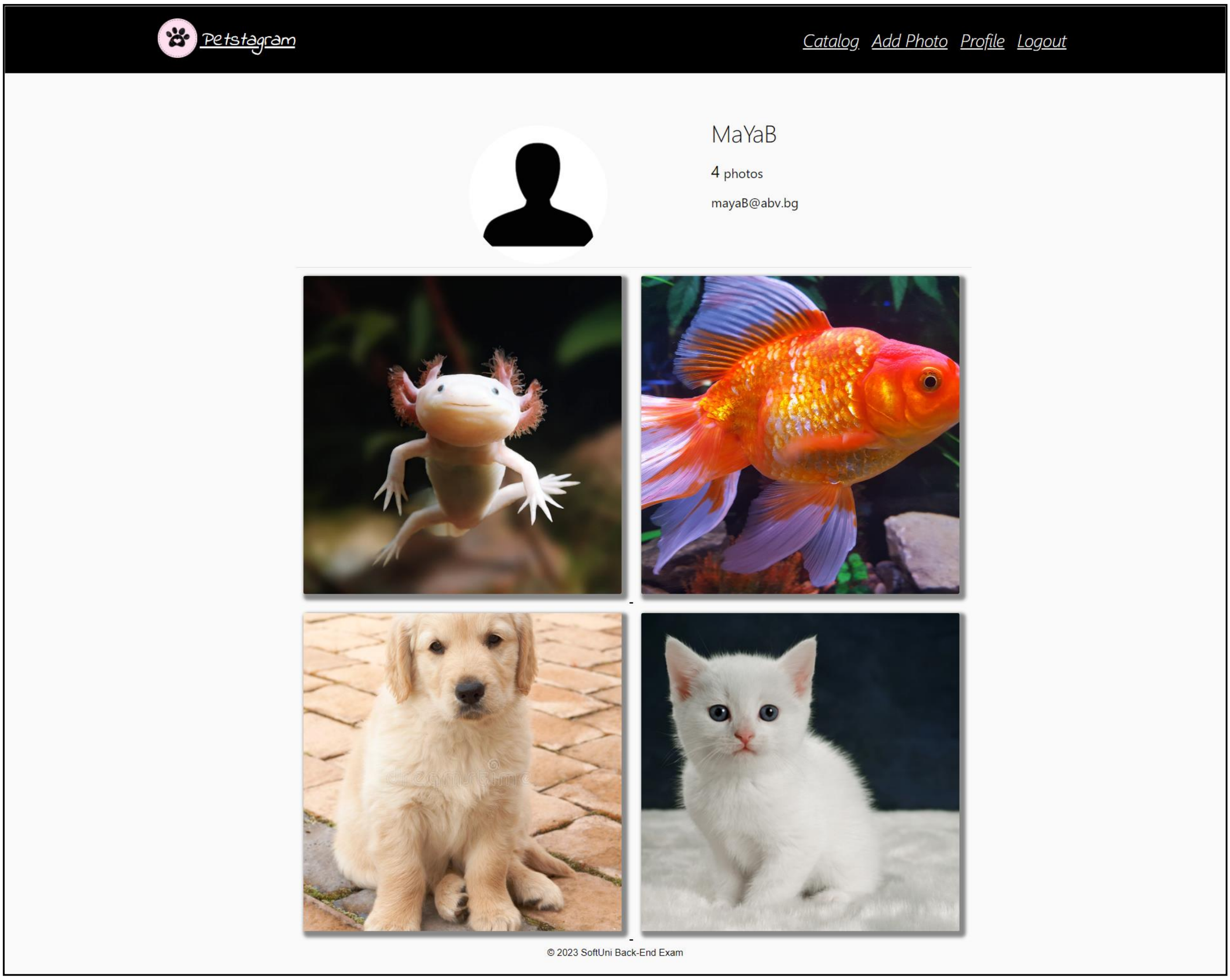


Photo validation failed: imageUrl: Validator failed for path `imageUrl` with value ``

© 2023 SoftUni Back-End Exam

8. * Bonus – Profile (10 Pts)

Each **logged-in user** should be able to view their profile information by clicking [**Profile**]. They should see their **username, the number of photos they have created, their email, and all their photos below.**



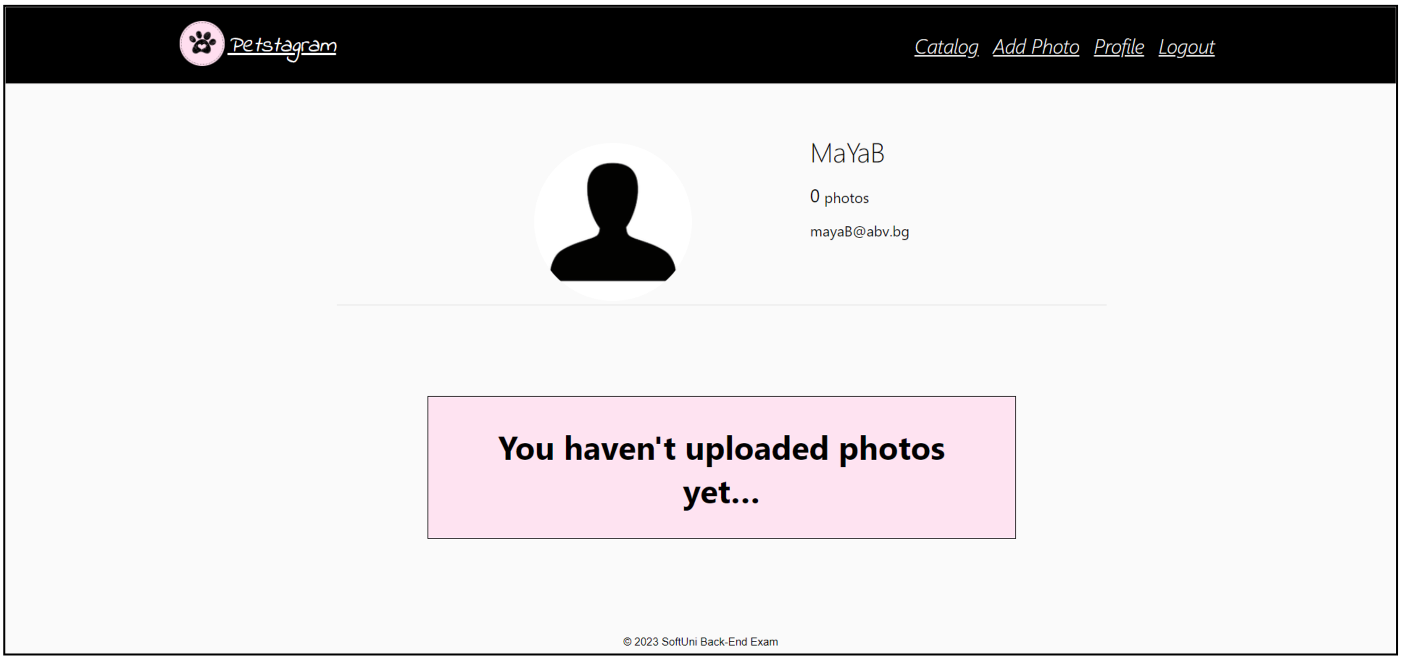
MaYaB

4 photos

mayaB@abv.bg

© 2023 SoftUni Back-End Exam

If they have **not created any photo posts** yet, the message **"`You haven't uploaded photos yet…`"** should be visualized.



MaYaB

0 photos

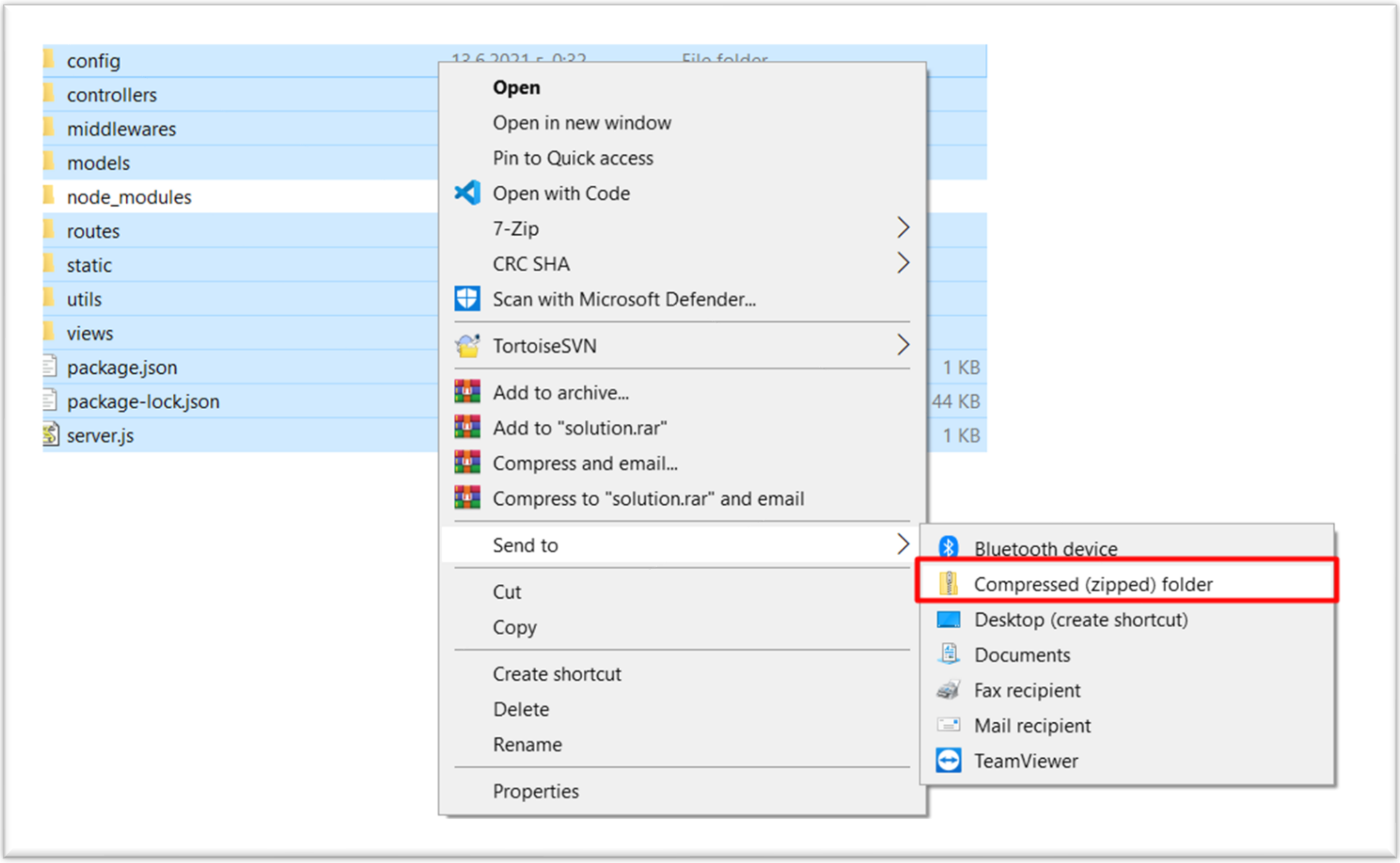
mayaB@abv.bg

You haven't uploaded photos yet...

© 2023 SoftUni Back-End Exam

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/3972/js-back-end-january-2023



GOOD LUCK! 😊