

Building a Full-Stack User Management System Similar to Instagram

Assignment



Objective:

The objective of this assignment is to create a full-stack user info and login system that resembles the functionality of Instagram. The system will be built using HTML, CSS, and JavaScript for the front-end, while the back-end will be developed using Express.js and MongoDB.

Requirements:

Front-End Development:

- Design a visually appealing user interface using HTML and CSS.
- Create an intuitive user registration form that captures essential details like username, email, and password & bio & Name
- Develop a login form that authenticates users and verifies their credentials.

Back-End Development:

- Use Express.js to handle HTTP requests and responses.
- Set up a MongoDB database to store user information securely.
- Implement user registration functionality by validating and saving user data to the database.
- Develop a login mechanism that verifies user credentials against the stored data.
- Generate JWT token and Store it into cache

Security:

- Hash and salt user passwords before storing them in the database to enhance security.
- Protect sensitive routes and ensure that only authenticated users can access them.

Documentation

- Provide clear and concise documentation on how to set up and run the application.

Deliverables:

Complete source code of the front-end and back-end implementation.

A document containing instructions for setting up and running the system.

Note: You are encouraged to enhance the system beyond the specified requirements, add additional features, and improve the user experience.

Description & Api Endpoint

Backend:

"/signup" → create a signUp routes which takes {name,username,bio,email,password} as response and hash password and then store data in database

"signupDataValidate" → create a middleware which checks if user has provided required data or not based on that send response or move further

"/login" → create a login routes which takes {user,password} as response, generate jwt token and set to cookie and response with success message

"loginDataValidate" → create a middleware which checks if user has provided required data or not based on that send response or move further

"/" → create home route which will authenticate (hint: use authenticateUser middleware to achieve it) user and will send user data

"authenticateUser" → create authenticate user which verify token given by user through cache then then proceed based on the output

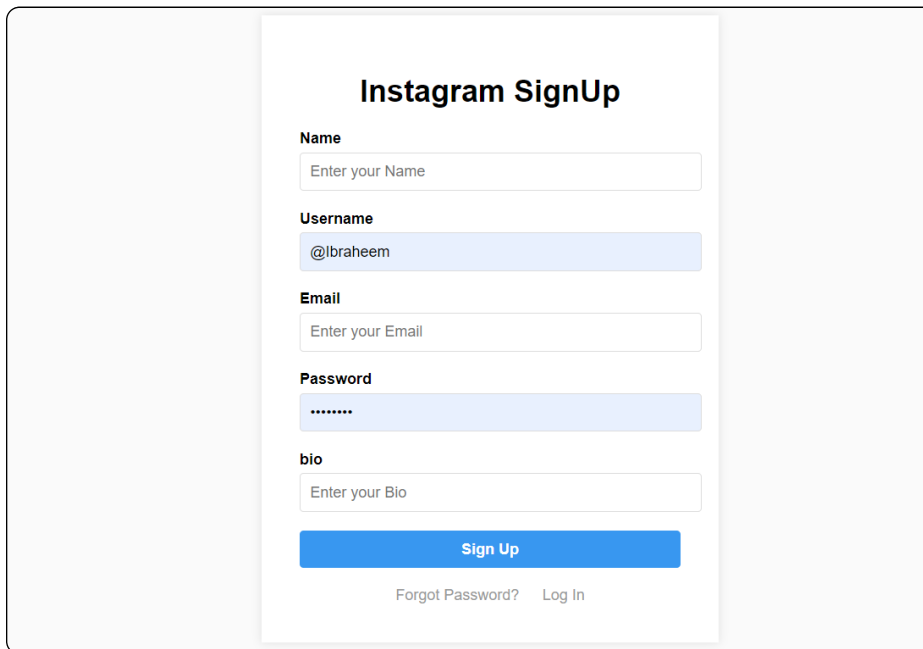
FrontEnd:

SignUp Page: Create a sign up page after successful signup redirect to login page

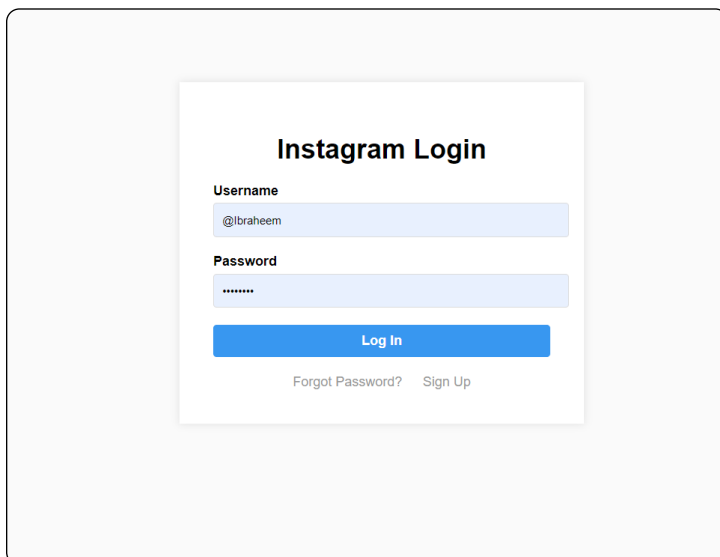
Login Page: Build Login Page after successful Login Redirect to User Page

User Page: Create a user page which has demo image and rest of the data fetch from server by authenticating user

Images are given below for your reference



The image shows a mockup of an Instagram sign-up form. The form is titled "Instagram SignUp" and is set against a light gray background. It contains the following fields: "Name" with a placeholder "Enter your Name", "Username" with a placeholder "@ibraheem", "Email" with a placeholder "Enter your Email", "Password" with a placeholder "*****", and "bio" with a placeholder "Enter your Bio". Below these fields is a blue "Sign Up" button. At the bottom of the form, there are two links: "Forgot Password?" and "Log In".



The image shows a mockup of an Instagram login form. The form is titled "Instagram Login" and is set against a light gray background. It contains the following fields: "Username" with a placeholder "@ibraheem" and "Password" with a placeholder "*****". Below these fields is a blue "Log In" button. At the bottom of the form, there are two links: "Forgot Password?" and "Sign Up".



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