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Digital Newspaper Website
Use-Case Specification: Register

Version 1.0

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Revision History

Date	Version	Description	Author
16/07/2025	1.0	Specific about Register use case	Nguyễn Tấn Lộc

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Use-Case Specification: Register

1. Use-Case Name: Register

1.1 Brief Description

This use case describes how a new user creates an account by entering personal information (full name, email, password) and complete email verification through a verification code, when the code is verified, the system registers user and redirects them to the login page

2. Flow of Events

2.1 Basic Flow

1. The user click the Register button from the homepage
2. The system displays the login form with fields:
    a. Full name
    b. Email
    c. Password
    d. Confirm password
3. The user enter their credentials and clicks submit button
4. The system validates the inputs:
    a. Check mail is valid and not already registered
    b. Confirms that password and confirm password match
    c. Verifies password strength (e.g min 8 character, have uppercase, number, special characters)
5. The system sends a verification code to mail which has been received
6. The system display new form requirement user to enter verification code
7. The user check mail and find verification code is sent
8. The user write verification code and clicks submit button
9. If valid, the system
    a. Store the user`s information in database
    b. Send a verification email(if applicable)
    c. Displays a message “registration successful"
    d. Redirects the user to the login page

2.2 Alternative Flows

2.2.1 Email already registered

- At step 4, the mail already registered exists in the database

2.2.1.1 An Alternative Subflow

- The system displays an error message “this email is already registed, please use another email or log in”

2.2.2 Passwords do not matching

- At step 4, the password and confirm password do not match

2.2.2.1 An Alternative Subflow

1. The system displays an error message “ passwords do not match”
2. User must re-enter the fields

2.2.3 Weak password

- The password doesn`t meet strength requirements

2.2.3.1 An Alternative Subflow

1. The system display error message: “password must be at least 8 character and include uppercase, numbers, symbols"
2. User must re-enter stronger password

2.2.4 Invalid or expired verification code

- At step 8, the verification code is invalid or has expired

2.2.4.1 An Alternative Subflow

1. The system displays error message: “valid or expired verification code”
2. Provides an option to resend the verification code and re-enter verification code.

3. Special Requirements

3.1 Verification code timeout

- The verification code expires after 5 mintutes.

3.2 Password encryption:

- All password must store using secure hashing algorithms

3.3 Rate limiting

- Limit the number of verification attempts to avoid abuse

3.4 Email format validation

- Ensure email format is RFC-compliant before sending code

3.5 Device compatibility

- Forms must work seamlessly with mobile devices, tablet and desktop.

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4. Preconditions

4.1 The user doesn`t already have an account

4.2 The system is connected to the internet and email service is functioning

5. Postconditions

5.1 A new user account is created and stored in the database

5.2 The user receives confirmation of registration success

5.3 The user is redirected to the login page

6. Extension Points

6.1 Resend verification code

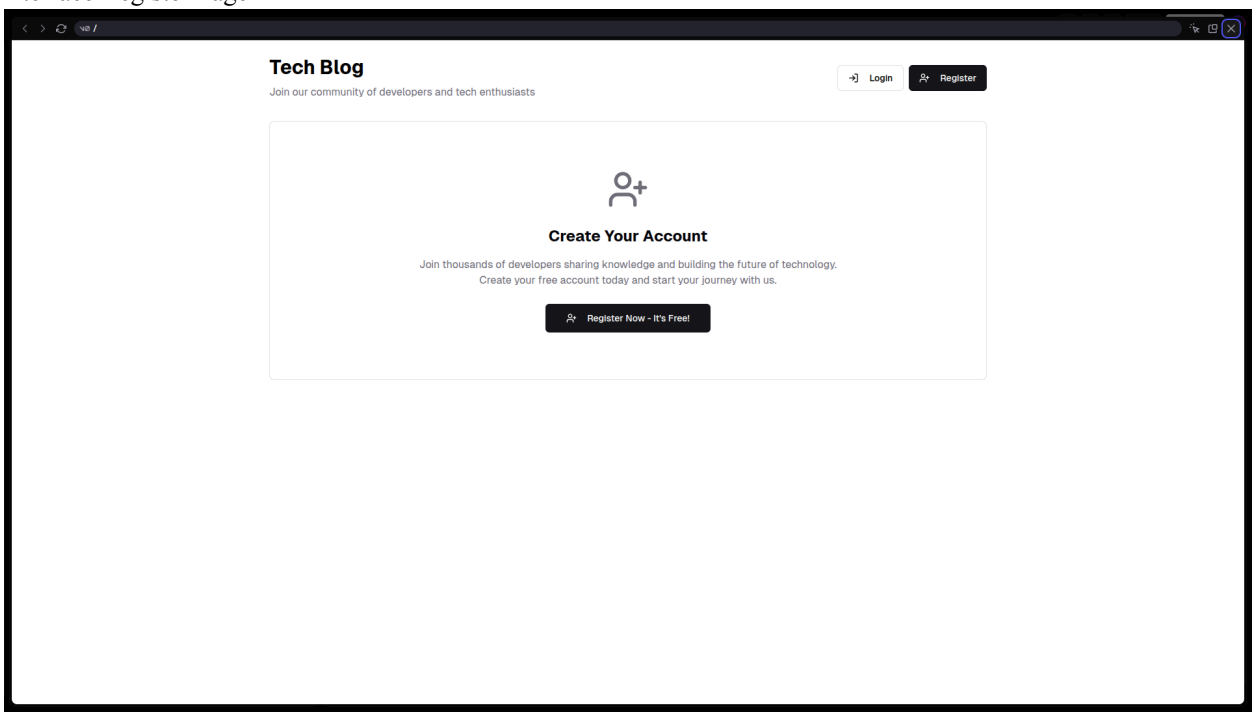
- After step 8, user may request to resend the verification code if needed

6.2 Auto login after verify

- After step 9, the system may optionally log the user in immediately

7. Generate Interface

Interface Register Page



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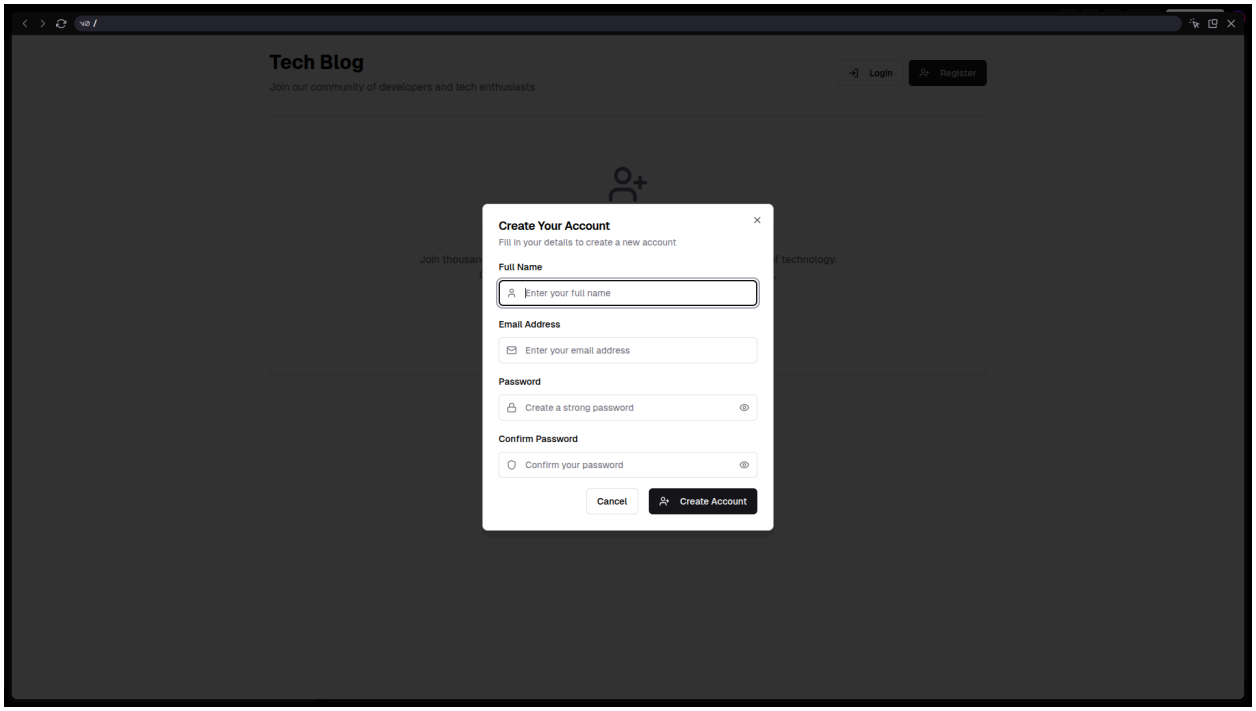
User click Register button, and the system dislays:



When the user enters a password, he must enter the same in the confirm password box.

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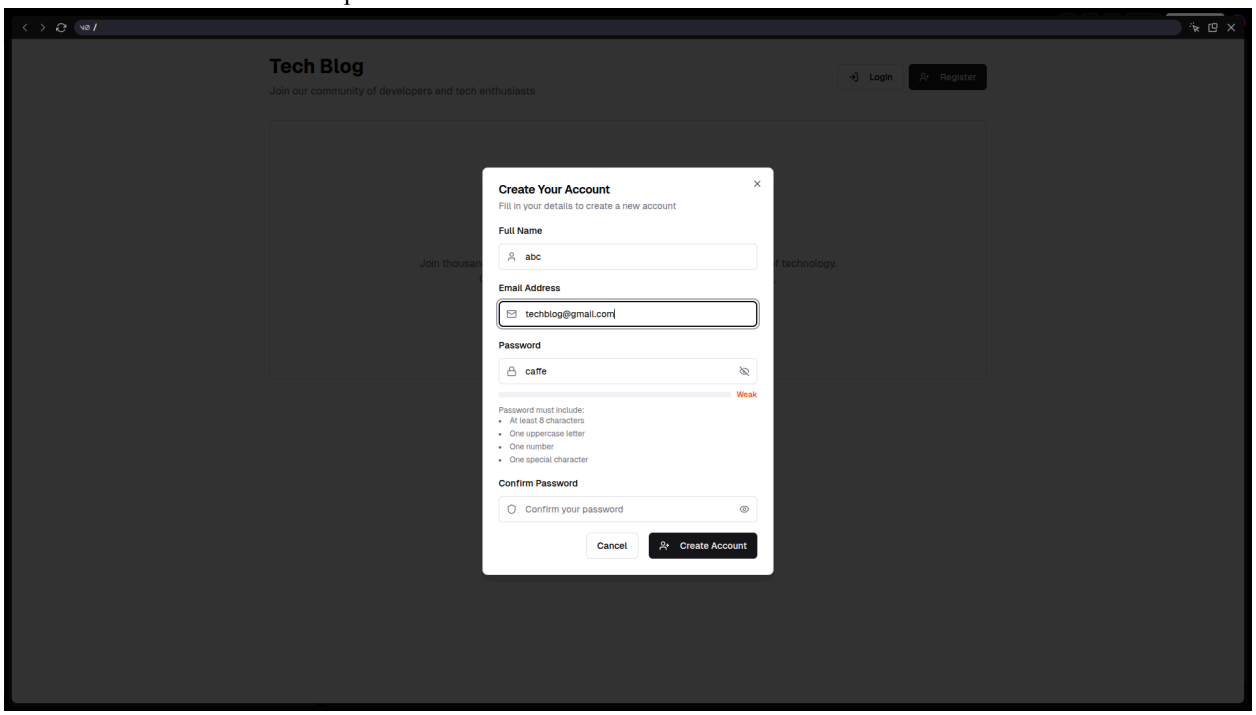
with registering, the user must comply with the following requirements: At least 8 characters, one uppercase letter, one numeric character and one special character.



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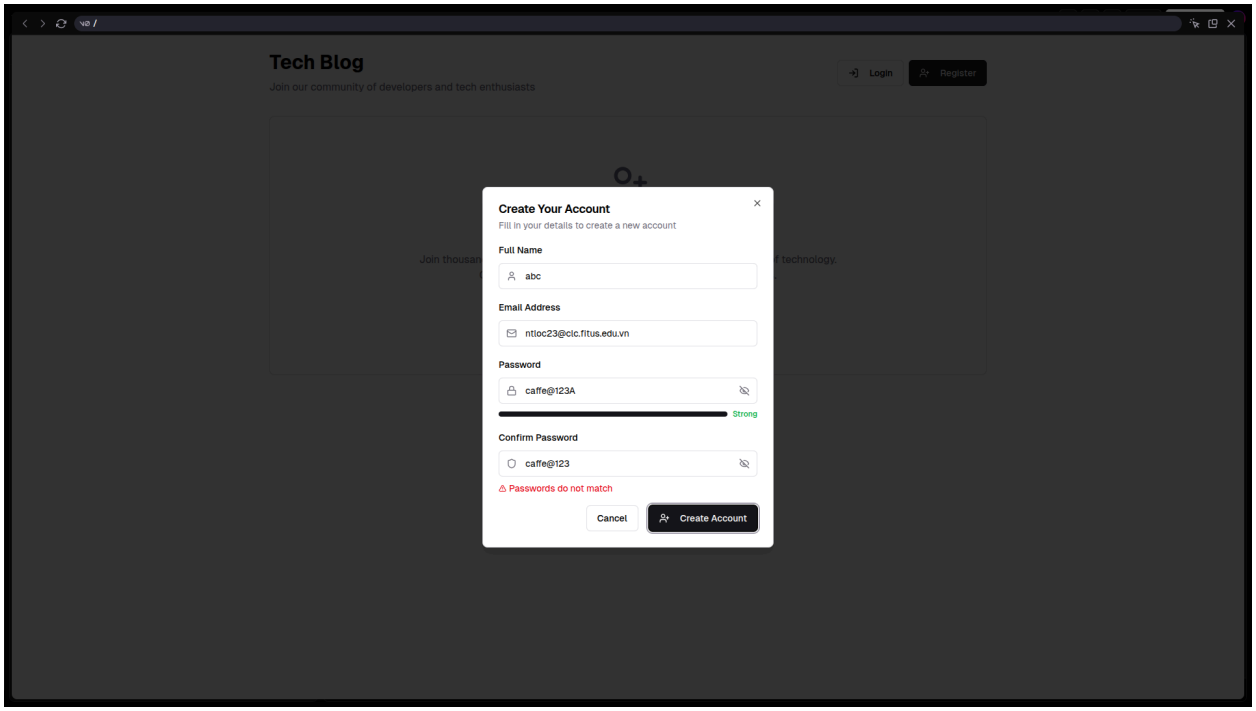
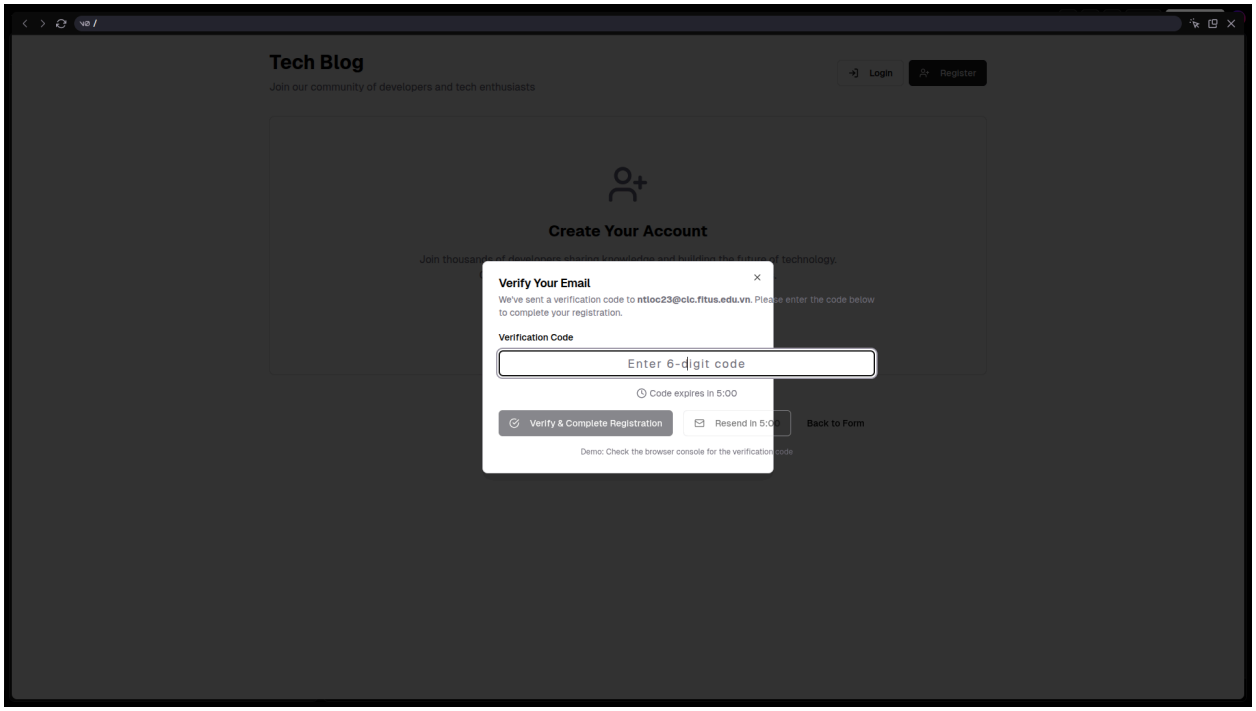
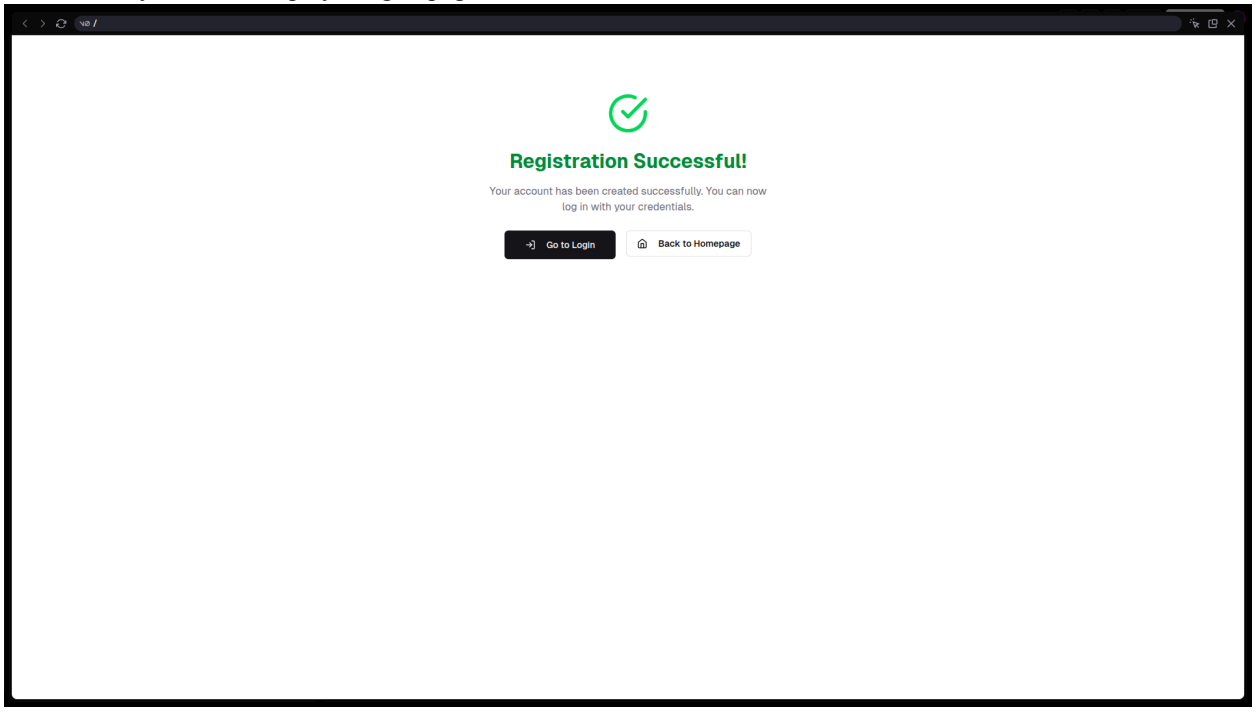
When the user enters a password, he must enter the same in the confirm password box.



When the user enters a password, he must enter the same in the confirm password box.



The post code will send to user mail and the user will write that into and click the Verify & Complete Registration button. The system will display a log in page.



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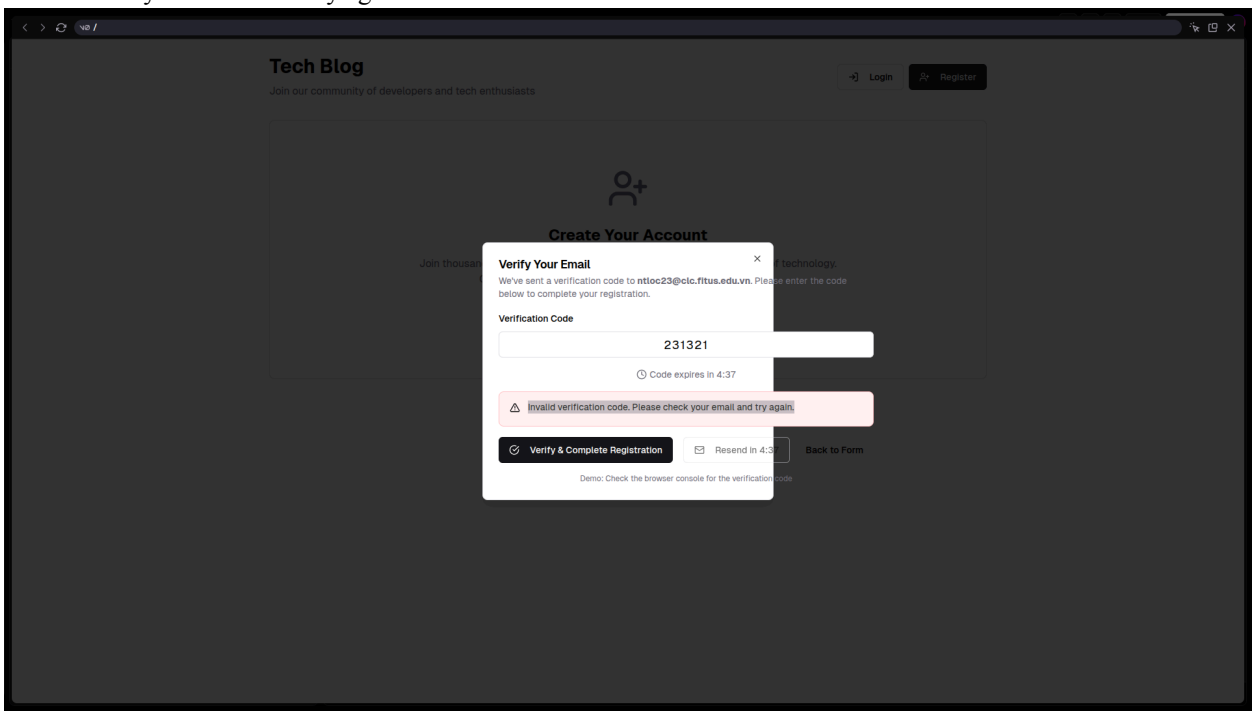
And if the Verify & Complete Registration is wrong, the system will display message: “Invalid verification code. Please check your email and try again.”



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