
404 Not Found

**Digital Newspaper Website
Use-Case Specification: Submit Article**

Version 1.0

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Submit Article	Date: 31/7/2025
UC01	

Revision History

Date	Version	Description	Author
1/7/2025	1.0	Specific about Submit Article use case	Nguyễn Tân Lộc

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4.2 The article exist and is in draft state	5
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5. Postconditions	5
5.1 Article status = pending review	5
5.2 A review task is created and assigned to the specified editor	5
5.3 Notification record is saved (even if failed)	5
6. Extension Points	5
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Use-Case Specification: Submit Article

1. Use-Case Name: Submit Article

1.1 Brief Description

Writer selects a draft article and submits it to the editor for review. The system changes state to “ pending review” and notifies the editor by mail and in-app notification.

2. Flow of Events

2.1 Basic Flow

1. Initiates actor: writer logs and navigates to My Articles.
2. The writer selects a draft article and clicks submit for approval.
3. The system displays a confirmation dialog showing the article and target editor.
4. Writer clicks confirm.
5. System:
 - a. Updates article status to pending review
 - b. Create a review task to the editor
 - c. Send an email and in-app notification to editor with a link to an article
6. The system displays a “ submission successful” message to the writer.

2.2 Alternative Flows

2.2.1 Cancel Submission

- In step 3, writer clicks cancel instead of confirm

2.2.1.1 An Alternative Subflow

- System closes the confirmation dialog
- No changes are made, article remains in draft
- Return to my draft view

2.2.2 Notification failure

- In step 5.3, the system fails to send mail or in-app notifications due to network issues or services error

2.2.2.1 An Alternative Subflow

1. The system logs the notification error
2. Still updates article states to pending review and create review task
3. Display warning “submission successful, but unable to notify editor, please contact them manually”

3. Special Requirements

3.1 Email format

- Notification email must include article title, summary, and a direct link to the review page

3.2 UI standard:

- Confirmation dialog and success/warning messages must follow the style.

3.3 Performance

- Status update and task must be completed in 1 second time normal load

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4. Preconditions

- 4.1 Writer is authenticated
- 4.2 The article exist and is in draft state
- 4.3 Target editor role exist in system

5. Postconditions

- 5.1 Article status = pending review
- 5.2 A review task is created and assigned to the specified editor
- 5.3 Notification record is saved (even if failed)

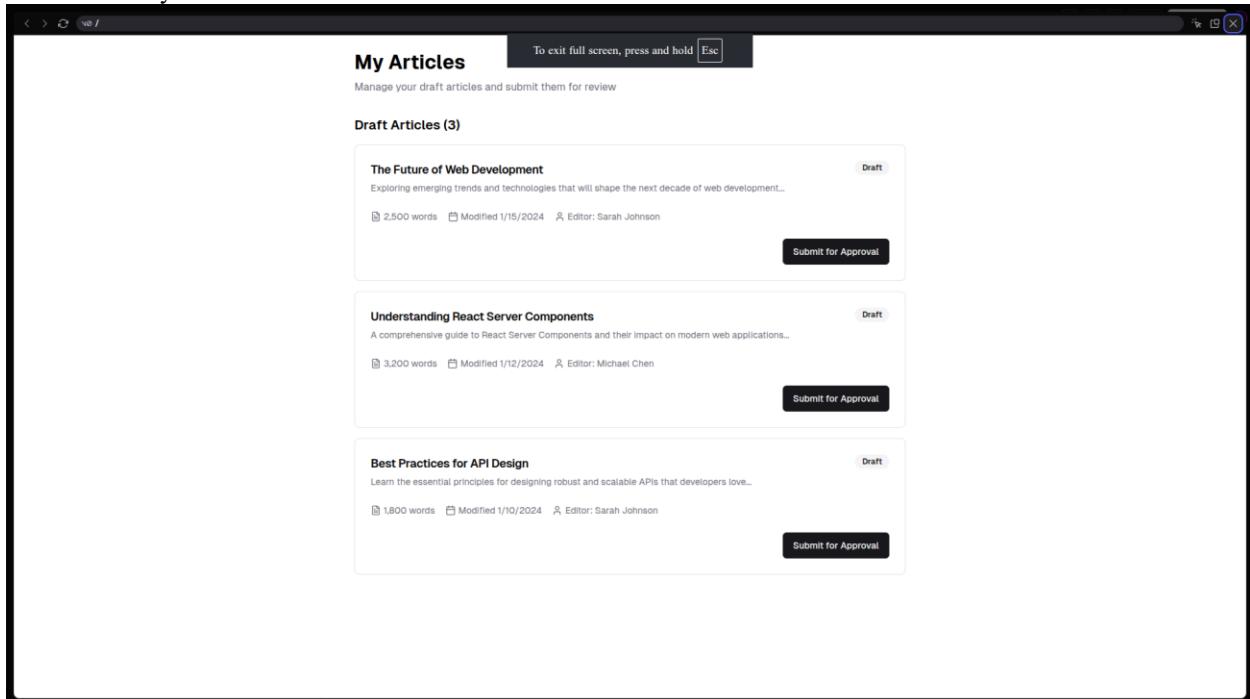
6. Extension Points

6.1 Select editor

After step 3: writer may change the default editor before confirmation.

7. Generate Interface

Interface of My Articles



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Click on Submit for Approval and click Confirm to submit, or Cancel.

My Articles

Manage your draft articles and submit them for review

Draft Articles (2)

The Future of Web Development Draft
Exploring emerging trends and technologies that will shape the next decade of web development...
2,500 words Modified 1/15/2024 Editor: Sarah Johnson

Best Practices for AP Draft
Learn the essential principles for effective article submission...
1,800 words Modified 1/15/2024

Submit Article for Review
Please confirm that you want to submit this article for editorial review.

The Future of Web Development
Exploring emerging trends and technologies that will shape the next decade of web development...
2,500 words

Target Editor:
Sarah Johnson
sarah.johnson@company.com

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when we click ComFirm system will back to My Article page and with message: “article submitted successfully the editor has been notified”

My Articles

Manage your draft articles and submit them for review

 Article submitted successfully! The editor has been notified.

Draft Articles (2)

The Future of Web Development

Draft

Exploring emerging trends and technologies that will shape the next decade of web development...

 2,500 words  Modified 1/15/2024  Editor: Sarah Johnson

Submit for Approval

Best Practices for API Design

Draft

Learn the essential principles for designing robust and scalable APIs that developers love...

 1,800 words  Modified 1/10/2024  Editor: Sarah Johnson

Submit for Approval

When we click, the Cancel system will go back to the My Article page.

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**Digital Newspaper Website
Use-Case Specification: Comment Article**

Version 1.0

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Comment Article	Date: 31/7/2025
UC02	

Revision History

Date	Version	Description	Author
12/7/2025	1.0	Specific about Comment Article use case	Nguyễn Tân Lộc

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Comment Article	Date: 31/7/2025
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2.2.2 Empty or too long comment	4
2.2.2.1 An Alternative Subflow	4
2.2.3 Contains prohibited comments	4
2.2.3.1 An Alternative Subflow	4
2.2.4 Database save failed	5
2.2.4.1 An Alternative Subflow	5
3. Special Requirements	5
3.1 Profanity filter	5
3.2 Comment display time	5
3.3 Responsive UI	5
3.4 Edit/delete comment	5
3.5 Spam prevention	5
4. Preconditions	5
4.1 The user is authenticated	5
4.2 The article is in a “published” state and publicly viewable	5
4.3 The commenting feature is enabled for that article	5
5. Postconditions	5
5.1 A valid comment is stored in database, linked to the user and article	5
5.2 The comment appears on the article's page, visible to all readers.	5
5.3 The user may edit or delete the comment for a limited time (30 minutes)	5
6. Extension Points	5
6.1 Report comment	5
6.2 Like/Dislike	5
6.3 Nested comments	5

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Use-Case Specification: Comment Article

7. Use-Case Name: Comment Article

7.1 Brief Description

This use case allows logged-in users to post a comment on a published article. The system validates the input, stores the comment, and displays it along with the user's name and timestamp. The user can also edit or delete their own comments within a limited time.

8. Flow of Events

8.1 Basic Flow

7. The user navigates to an article page
8. The system displays the full article content
9. If the user is logged in, the system displays a comment input box below the article
10. The user types a comment and clicks the submit button
11. The system performs validation on the comment
 - a. Ensures it is not empty
 - b. Checks for prohibited words or content violations.
 - c. Enforces a maximum character limit (500 words)
12. If validation, the system
 - a. Stores the comment in the database
 - b. Associates the content with the article and the user's ID
 - c. Displays the comment below the article with the user's name and timestamp
13. The user sees their comment appear in the comment section and is given the option to edit or delete (within allowed time)

8.2 Alternative Flows

8.2.1 User not logged in

- At step 3, user is not logged in

8.2.1.1 An Alternative Subflow

1. The comment input is hidden
2. The system displays a message: "you must be logged in to post a comment"
3. A login / register link is provided

8.2.2 Empty or too long comment

- At step 5, the comment is empty or exceeds the character limit

8.2.2.1 An Alternative Subflow

1. The system displays an error message: "comment can not be empty or too long"
2. The user must rewrite the comment

8.2.3 Contains prohibited comments

- The comment contains profanity or banned words

8.2.3.1 An Alternative Subflow

1. The system blocks the comment and shows: "your comment contains prohibited content"
2. User is prompted to revise the comment and resubmit

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8.2.4 Database save failed

- At step 6, the system fails to save the comment (e.g due to server/database error)

8.2.4.1 An Alternative Subflow

1. The system displays “unable to post comments at the moment. Please try again later”
2. The comment is not posted or stored

9. Special Requirements

9.1 Profanity filter

- The system must detect and block offensive, abusive or inappropriate language using a predefined list or AI-based moderation

9.2 Comment display time

- Approved comments should be visible within 1 second after submission

9.3 Responsive UI

- The comment input field and list must display correctly on all devices

9.4 Edit/delete comment

- Only author of a comment can edit or delete their own comments

9.5 Spam prevention

- The system should implement rate-limiting (e.g max 5 comment per minute per user)

10. Preconditions

10.1 The user is authenticated

10.2 The article is in a “published” state and publicly viewable

10.3 The commenting feature is enabled for that article

11. Postconditions

11.1 A valid comment is stored in database, linked to the user and article

11.2 The comment appears on the article's page, visible to all readers.

11.3 The user may edit or delete the comment for a limited time (30 minutes)

12. Extension Points

12.1 Report comment

- After step 7, other users can report a comment for moderation

12.2 Like/Dislike

- After step 7, users may react to others' comments using like/dislike buttons

12.3 Nested comments

- Step 4, the user can reply directly to another comment

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7. Generate Interface

Interface Comment Article when not logged in

Article Comments
 Login

Understanding Modern Web Development

Sarah Developer January 15, 2024

Web development has evolved significantly over the past decade. Modern frameworks like React, Vue, and Angular have revolutionized how we build user interfaces. Server-side rendering, static site generation, and edge computing are becoming standard practices. The ecosystem continues to grow with new tools and methodologies that help developers create better, faster, and more accessible web applications.

Comments (2)

You must be logged in to post a comment

[Login / Register](#)

Alice Johnson 2 hours ago

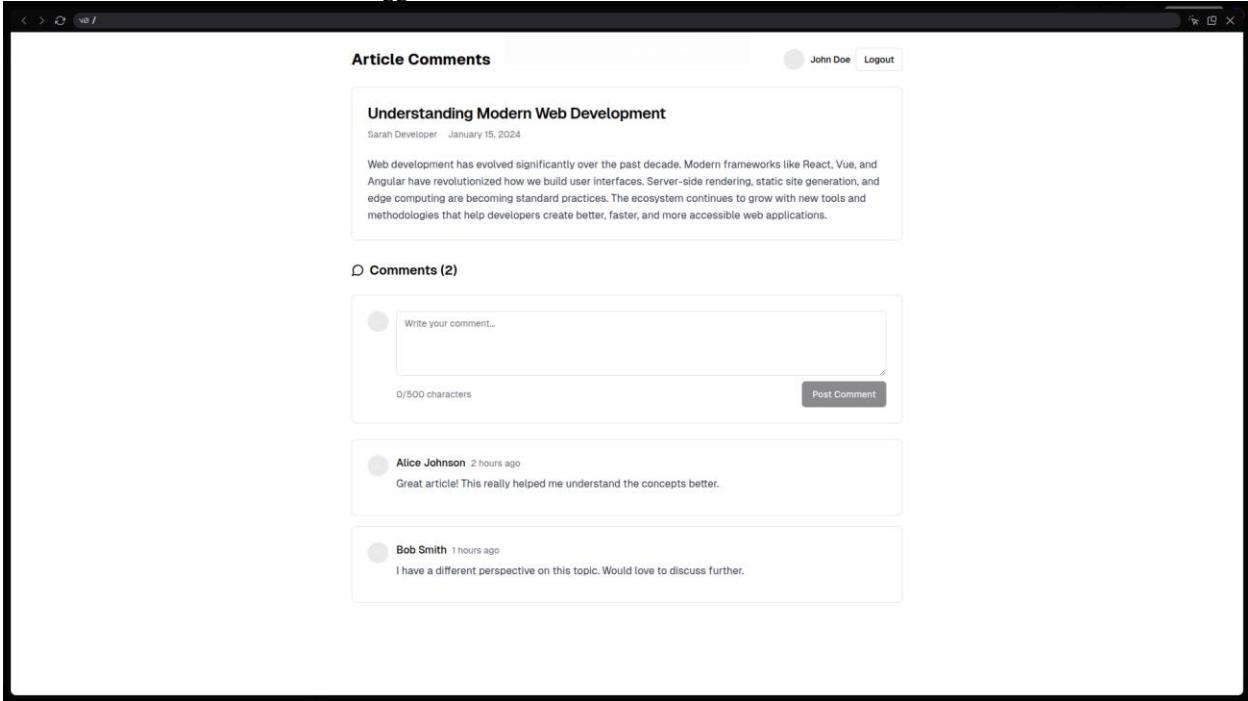
Great article! This really helped me understand the concepts better.

Bob Smith 47 minutes ago

I have a different perspective on this topic. Would love to discuss further.

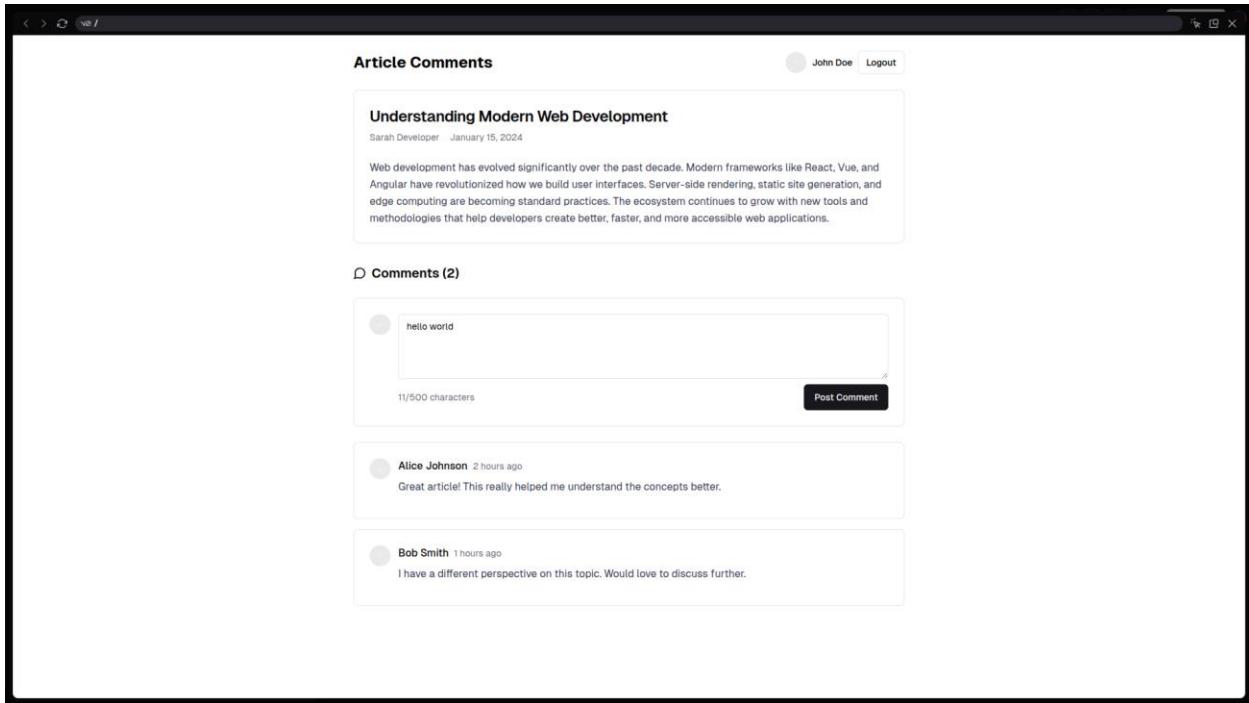
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Interface Comment Article when logged in

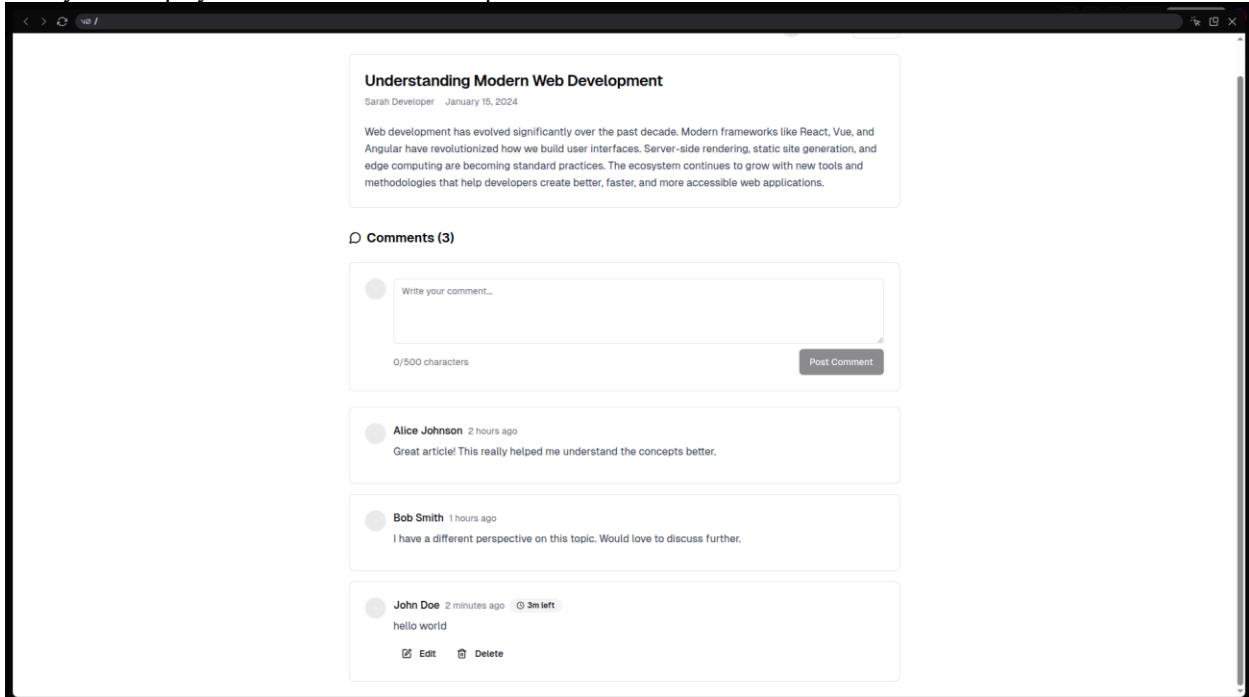


we can write comment (logged in) and click Post Comment to post

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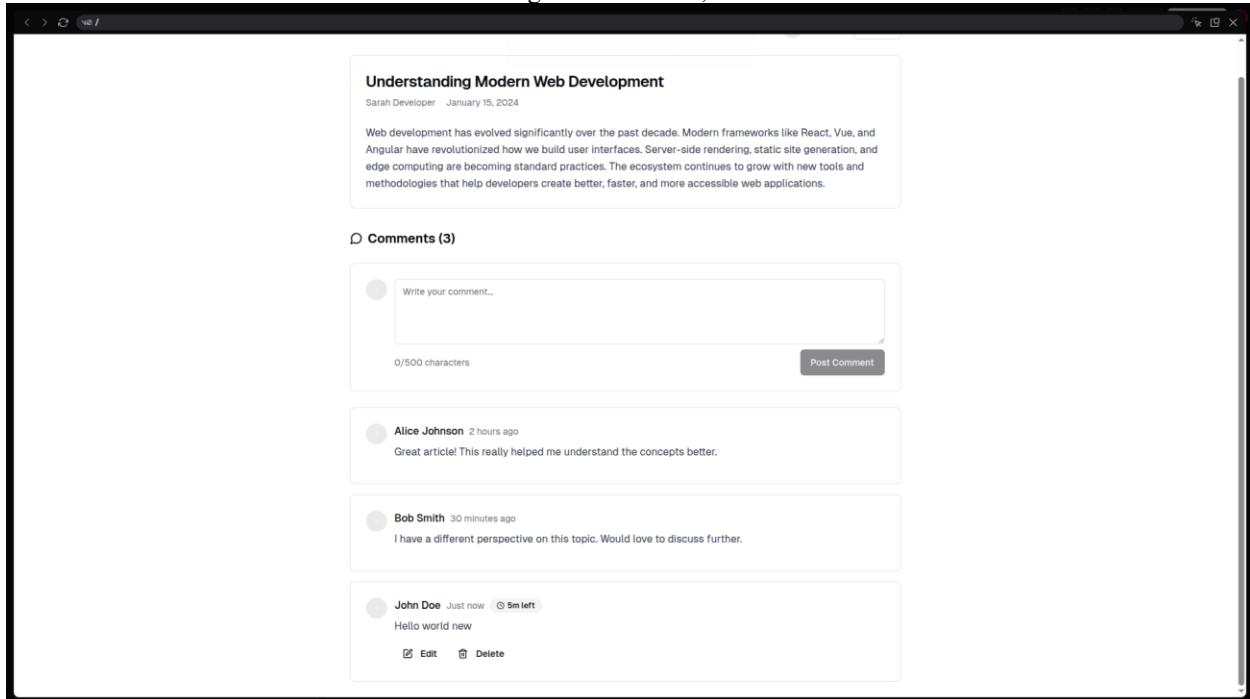


The system displays comment with timestamp and the commenter

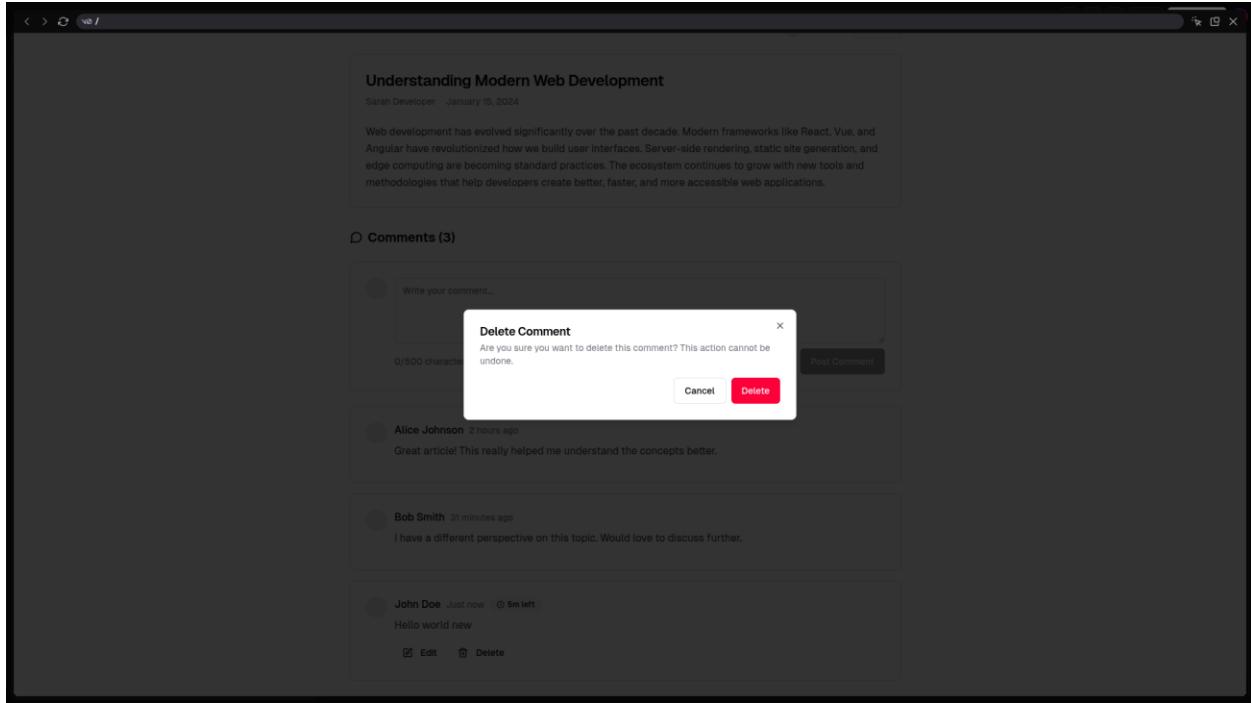


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So we can edit our comment when we want change our comment, also delete it



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**Digital Newspaper Website
Use-Case Specification: Read Article**

Version 1.0

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Use-Case Specification: Read Article	Date: 31/7/2025
UC03	

Revision History

Date	Version	Description	Author
15/07/2025	1.0	Specific about Read Article use case	Nguyễn Tân Lộc

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Read Article	Date: 31/7/2025
UC03	

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2.2.2 No internet connection	4
3. Special Requirements	4
3.1 Responsive Interface	5
3.2 Performance	5
3.3 Media optimization	5
4. Preconditions	5
4.1 The article must be approved by the editor and in “Published” status.	5
4.2 The system is operational and the user has internet access	5
5. Postconditions	5
5.1 The article is successfully displayed	5
5.2 If the user is logged in, the article is saved to their Reading History	5
5.3 Any user interaction (like, save, share) are recorded by the system	5
6. Extension Points	5
6.1 Related articles	5

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Use-Case Specification: Read Article

1. Use-Case Name: Read Article

1.1 Brief Description

A user (reader) selects and views an article on the website. The system displays the article's content, including title, body text, author, publishing date, image (video), related tags. If the user is logged in, they can like, comment, and save articles.

2. Flow of Events

2.1 Basic Flow

1. The user (logged in or not) accesses the homepage
2. The user selects an article by clicking its title or searching.
3. The system loads and displays the article's details:
 - a. Title
 - b. Published
 - c. Author's name
 - d. Article content (text)
 - e. Image or video (if any)
 - f. Related tags.
4. If user has logged in, the system also displays:
 - a. Comment box
 - b. "Save to favorite" Button
 - c. Share button
5. The user scrolls through the page to read the full article
6. If the user is logged in, the system saves the article into the user's reading history

2.2 Alternative Flows

2.2.1 *Article not found*

- The user accesses a broken or deleted article link.

2.2.1.1 An Alternative Subflow

- The system display an error page: "article not found"
- Suggest going back to the homepage.

2.2.2 *No internet connection*

- The user lost internet connection while loading the article

2.2.2.1 An Alternative Subflow

1. the system displays the message: "unable to load article. Please check your connection"
2. allows the user to retry once the connection is restored.

3. Special Requirements

3.1 Responsive Interface

- Article content must be properly displayed on mobile phones, tablets and desktop devices.

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3.2 Performance

- Article must load within 1 second under normal conditions

3.3 Media optimization

- Images and videos must be compressed and optimized for fast loading without sacrificing clarity.

4. Preconditions

4.1 The article must be approved by the editor and in “Published” status.

4.2 The system is operational and the user has internet access

5. Postconditions

5.1 The article is successfully displayed

5.2 If the user is logged in, the article is saved to their Reading History

5.3 Any user interaction (like, save, share) are recorded by the system

6. Extension Points

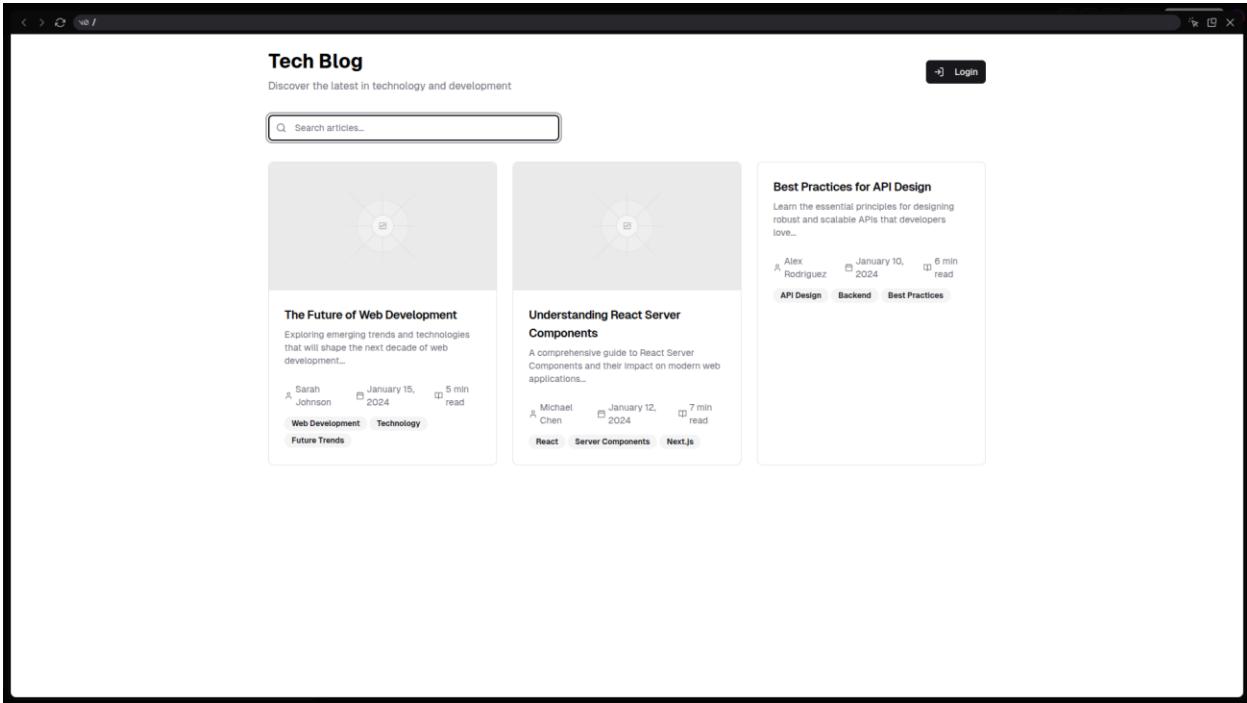
6.1 Related articles

- After step 6: The system may show 3-5 articles with similar tags.

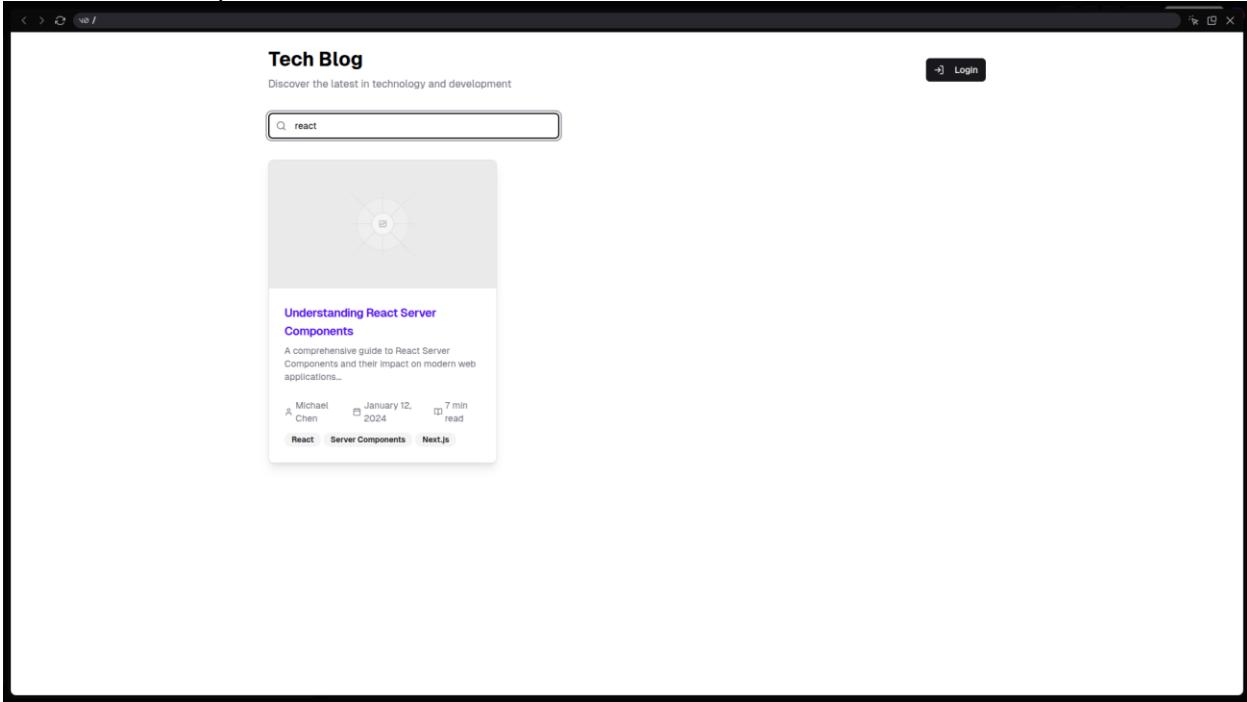
7. Generate Interface

Interface Articles

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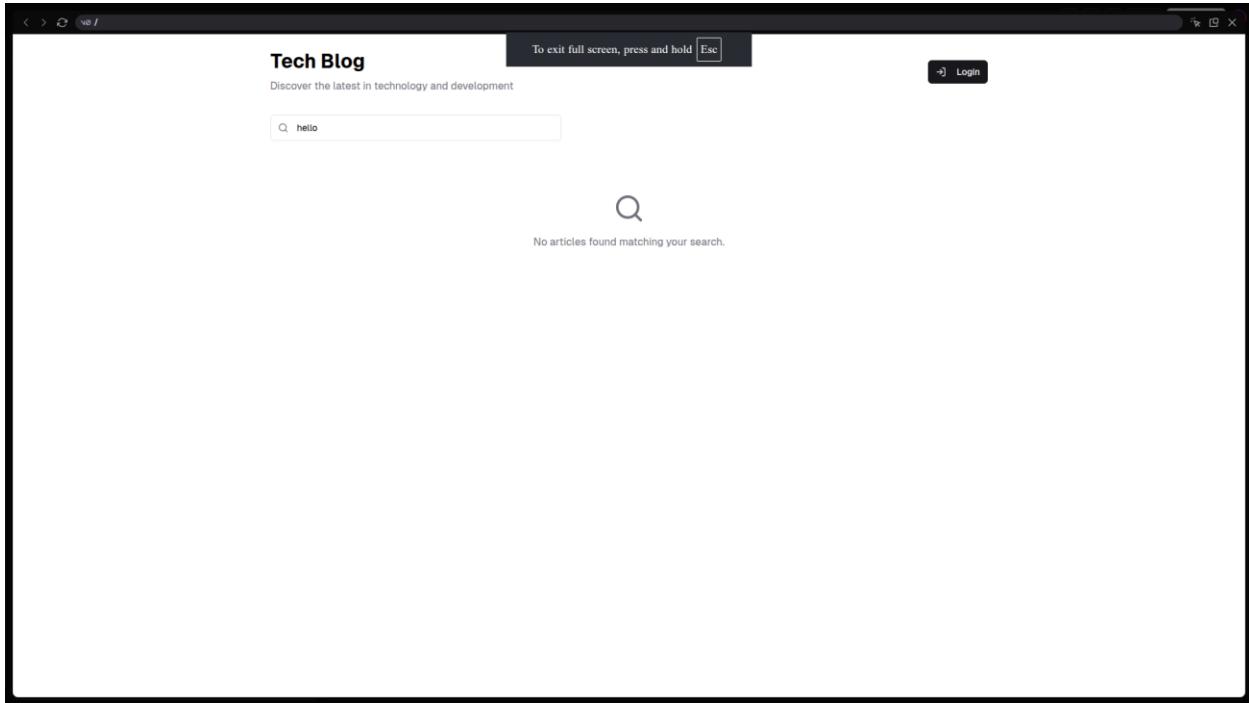


we can search for topics we want to read on the search bar.

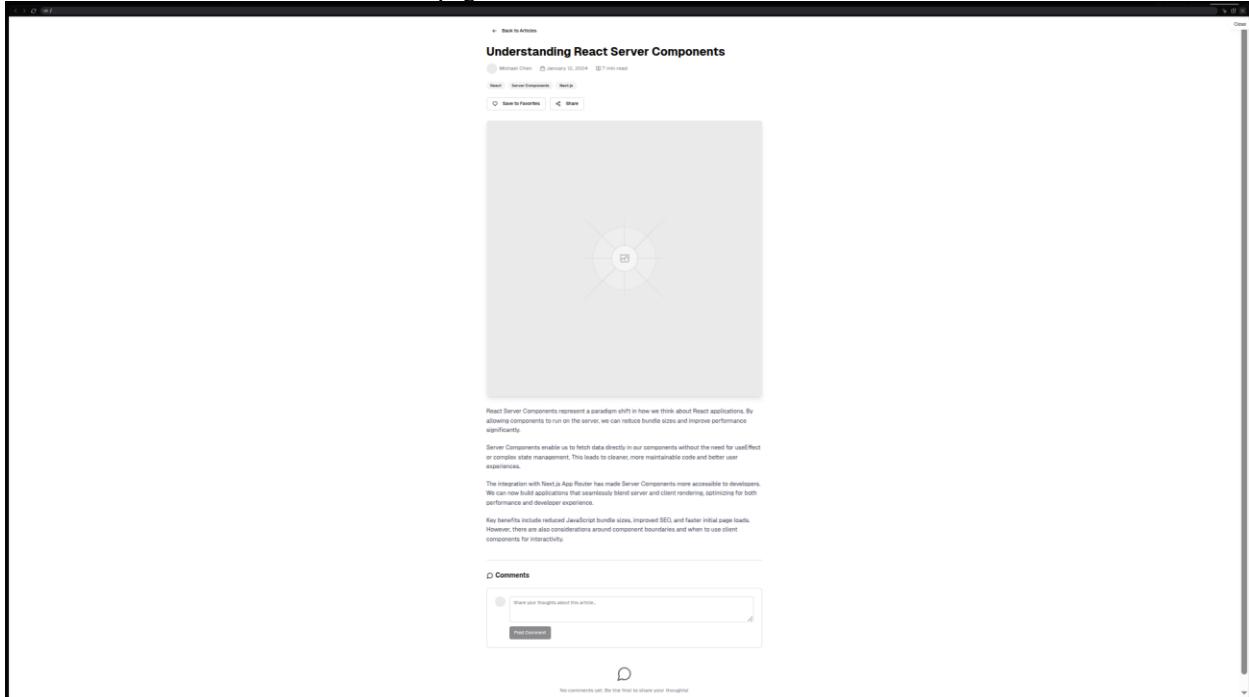


We can search for topics we want to read on the search bar, but the website don't have our topic.

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When we click article, we can scroll the page to read full article



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UC04	

Revision History

Date	Version	Description	Author
16/07/2025	1.0	Specific about Login use case	Nguyễn Tân Lộc

Digital Newspaper Website	Version: 1.0
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2.2.2 Account Locked	4
3. Special Requirements	4
3.1 Security	4
3.2 Session management	4
3.3 Responsiveness	5
3.4 Accessibility	5
4. Preconditions	5
4.1 The user must already have a registered account in the system	5
4.2 The system is online and accessible	5
5. Postconditions	5
5.1 The user is authenticated and session is started	5
5.2 The user gains access to restricted content and user-specific features	5
5.3 The login attempt is logged (for auditing and security tracking)	5

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Use-Case Specification: Login

7. Use-Case Name: Login

7.1 Brief Description

This use case describes how a registered user accesses their account by providing a valid username and password. If the credentials are correct, the system grants access and sets the session, if not, an error message is shown. Users may also request password recovery if needed.

8. Flow of Events

8.1 Basic Flow

7. The user click the login button from the homepage
8. The system displays the login form with fields: email/ username and password
9. The user enter their credentials and clicks submit button
10. The system validates the inputs:
 - a. Check mail/ username is existed
 - b. Verifies password
11. If the credentials are correct
 - a. The system authenticates the user
 - b. Sets a session token or login cookie
 - c. The system displays the homepage with user' personal account
12. The user is now logged in and can access authenticated features

8.2 Alternative Flows

8.2.1 *Invalid Credentials*

- In step 4, credential do not matching

8.2.1.1 An Alternative Subflow

- The system displays an error message “Invalid email or password. Please try again.”.
- Allow all users to re-enter credentials or choose password recovery

8.2.2 *Account Locked*

- The user enters incorrect credentials to much (e.g 5 times)

8.2.2.1 An Alternative Subflow

1. The system locks the account temporarily (e.g 5 minutes)
2. Display message “ your account is temporarily locked due to many failed login attempts”

9. Special Requirements

9.1 Security

- Passwords must be kept confidential to avoid information leakage.

9.2 Session management

- Session tokens or cookies must expire after a predefined period (eg. 1 hour)

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9.3 Responsiveness

- The login must render properly on all screen sizes

9.4 Accessibility

- The form must comply with WCAG 2.1 for screen readers and keyboard navigation

10. Preconditions

10.1 The user must already have a registered account in the system

10.2 The system is online and accessible

11. Postconditions

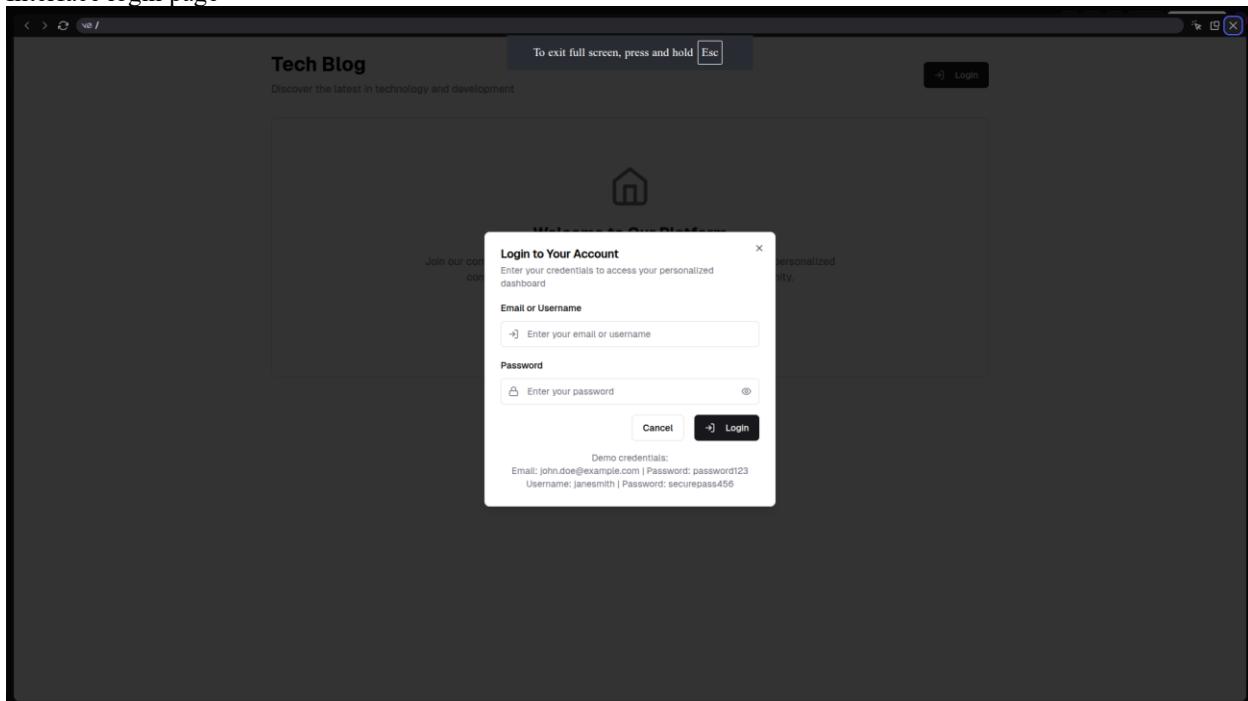
11.1 The user is authenticated and session is started

11.2 The user gains access to restricted content and user-specific features

11.3 The login attempt is logged (for auditing and security tracking)

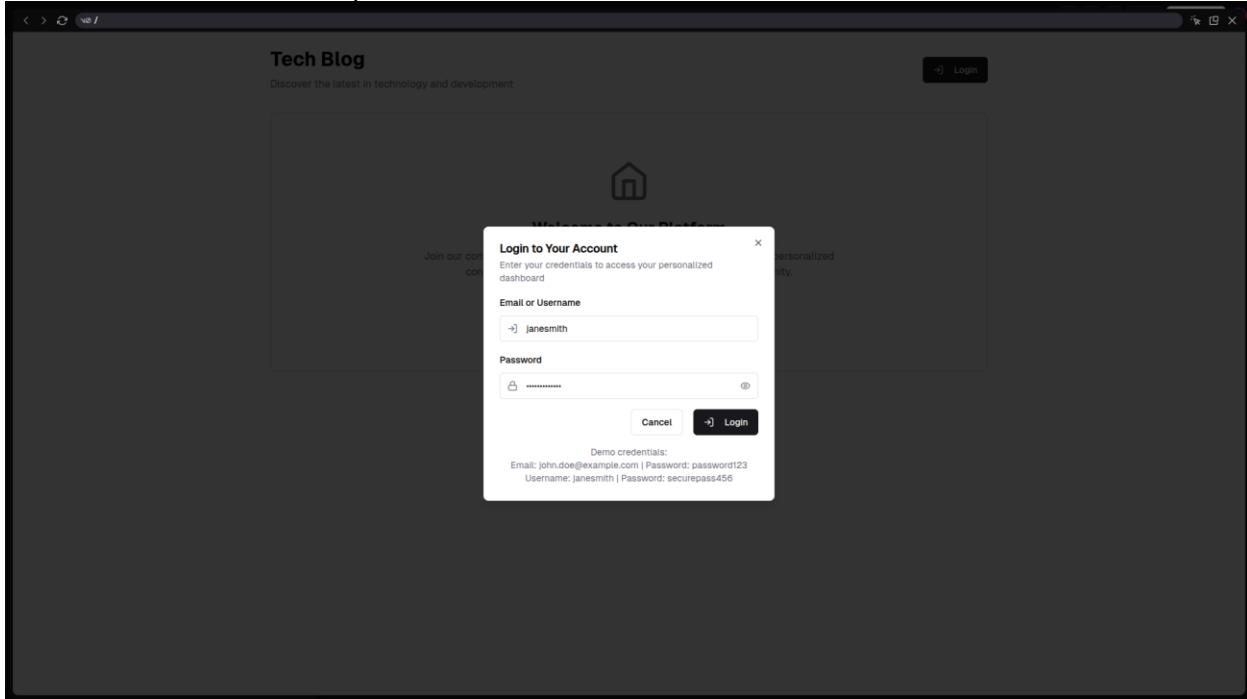
6. Generate Interface

Interface login page

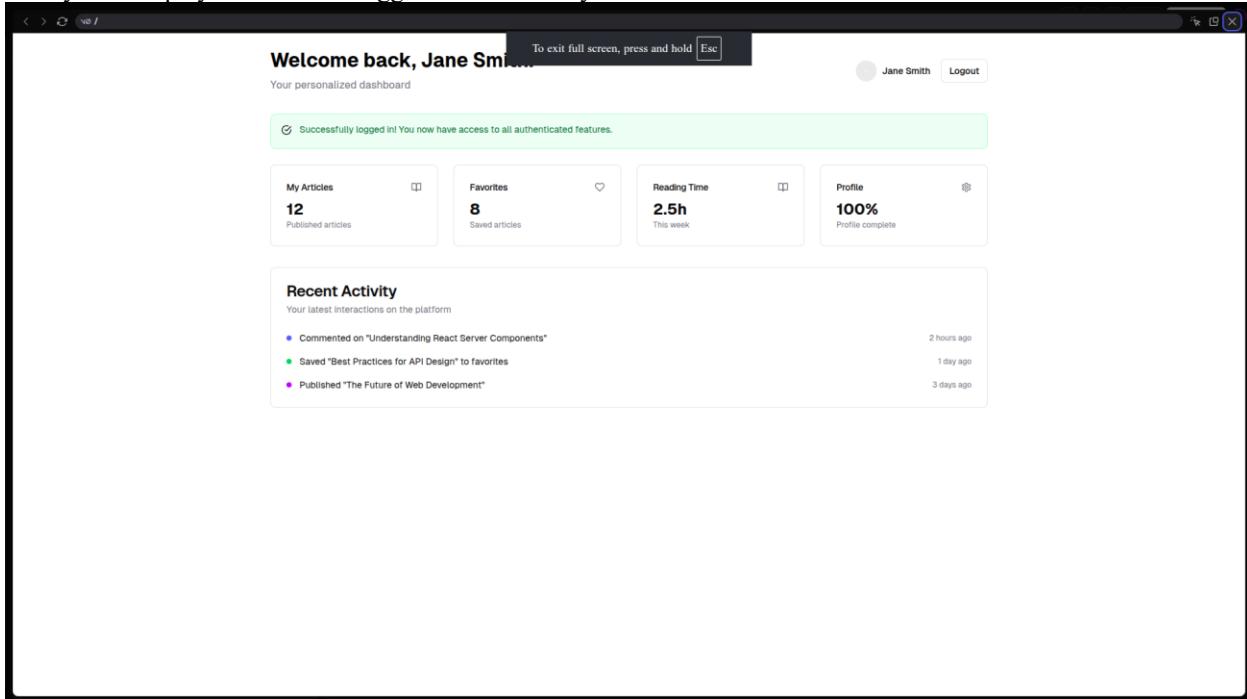


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User enter credentials username password

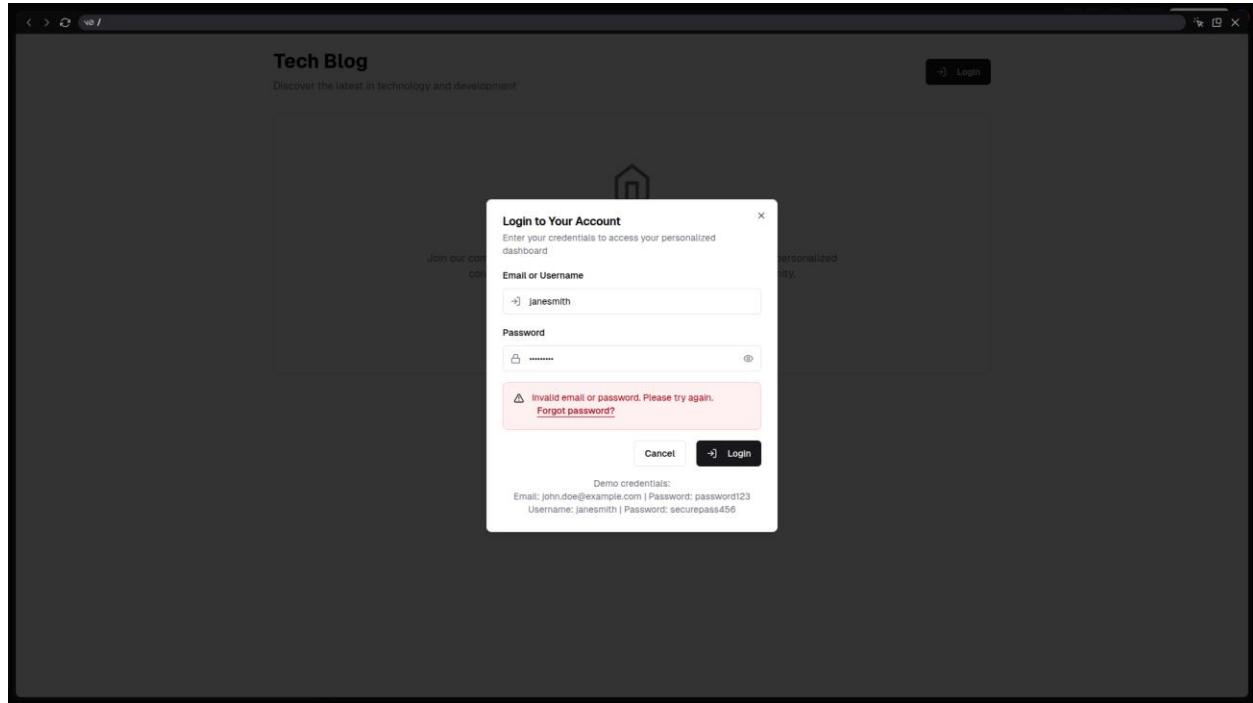


The system display screen when logged in successfully



If system check username or password are false

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**Digital Newspaper Website
Use-Case Specification: Register**

Version 1.0

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Use-Case Specification: Register	Date: 31/7/2025
UC05	

Revision History

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

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Register	Date: 31/7/2025
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2.2.2 Passwords do not matching	4
2.2.3 Weak password	5
2.2.4 Invalid or expired verification code	5
3. Special Requirements	5
3.1 Verification code timeout	5
3.2 Password encryption:	5
3.3 Rate limiting	5
3.4 Email format validation	5
3.5 Device compatibility	5
4. Preconditions	6
4.1 The user doesn't already have an account	6
4.2 The system is connected to the internet and email service is functioning	6
5. Postconditions	6
5.1 A new user account is created and stored in the database	6
5.2 The user receives confirmation of registration success	6
5.3 The user is redirected to the login page	6
6. Extension Points	6
6.1 Resend verification code	6
6.2 Auto login after verify	6

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Use-Case Specification: Register

12. Use-Case Name: Register

12.1 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

13. Flow of Events

13.1 Basic Flow

13. The user click the Register button from the homepage
14. The system displays the login form with fields:
 - a. Full name
 - b. Email
 - c. Password
 - d. Confirm password
15. The user enter their credentials and clicks submit button
16. 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)
17. The system sends a verification code to mail which has been received
18. The system display new form requirement user to enter verification code
19. The user check mail and find verification code is sent
20. The user write verification code and clicks submit button
21. 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

13.2 Alternative Flows

13.2.1 *Email already registered*

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

13.2.1.1 An Alternative Subflow

- The system displays an error message "this email is already registered, please use another email or log in"

13.2.2 *Passwords do not matching*

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

13.2.2.1 An Alternative Subflow

1. The system displays an error message "passwords do not match"

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- 2. User must re-enter the fields
- 13.2.3 Weak password**
- The password doesn't meet strength requirements
- 13.2.3.1 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
- 13.2.4 Invalid or expired verification code**
- At step 8, the verification code is invalid or has expired
- 13.2.4.1 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.

14. Special Requirements

14.1 Verification code timeout

- The verification code expires after 5 mintutes.

14.2 Password encryption:

- All password must store using secure hashing algorithms

14.3 Rate limiting

- Limit the number of verification attempts to avoid abuse

14.4 Email format validation

- Ensure email format is RFC-compliant before sending code

14.5 Device compatibility

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

15. Preconditions

15.1 The user doesn't already have an account

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

16. Postconditions

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

16.2 The user receives confirmation of registration success

16.3 The user is redirected to the login page

17. Extension Points

17.1 Resend verification code

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

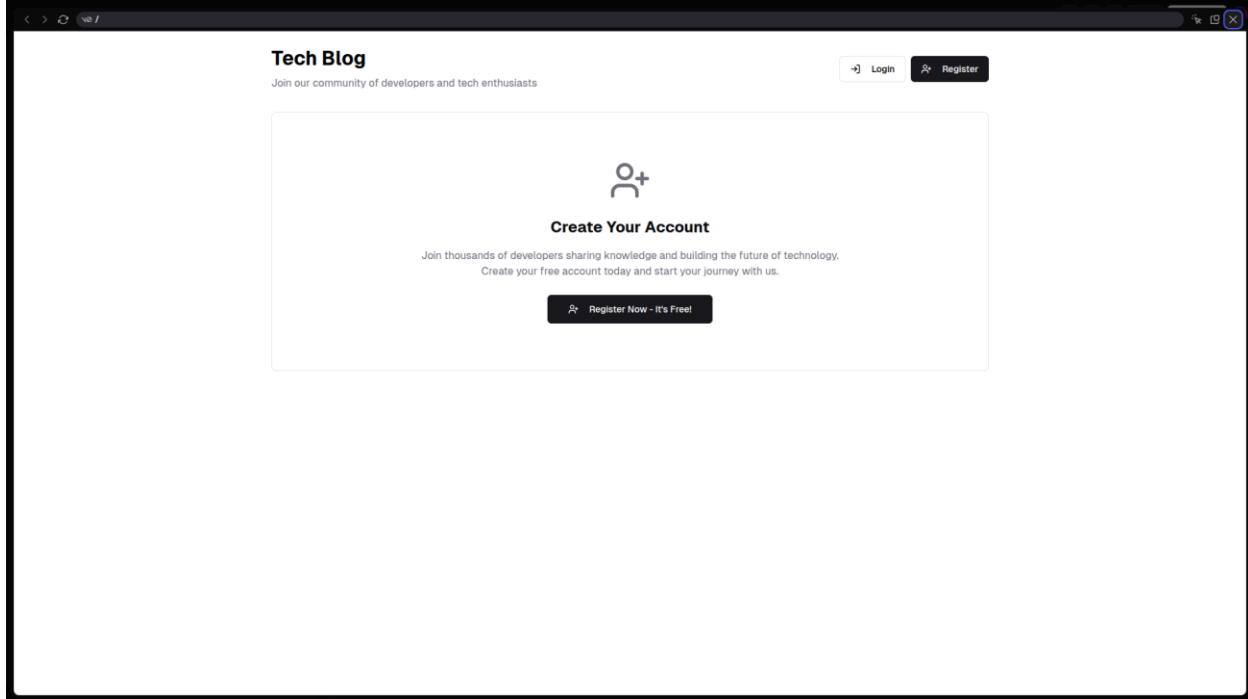
Digital Newspaper Website	Version: 1.0
Use-Case Specification: Register	Date: 31/7/2025
UC05	

17.2 Auto login after verify

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

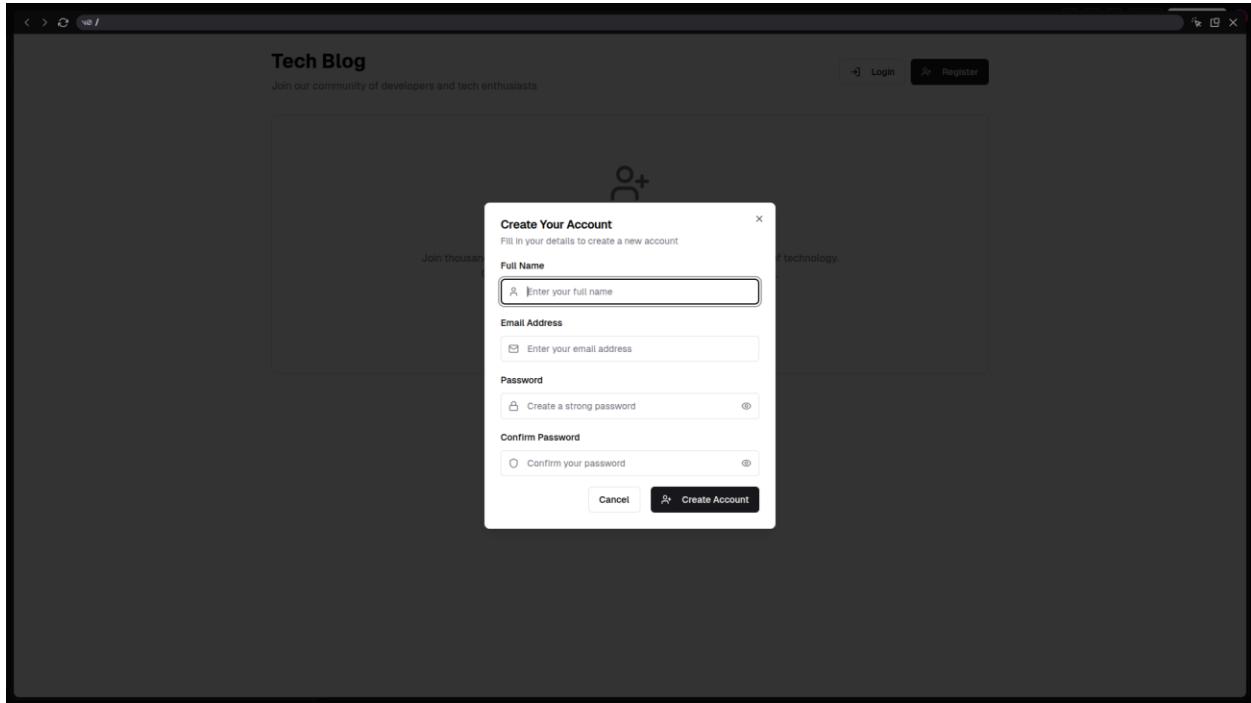
7. Generate Interface

Interface Register Page



User click Register button, and the system displays:

Digital Newspaper Website	Version: 1.0
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UC05	

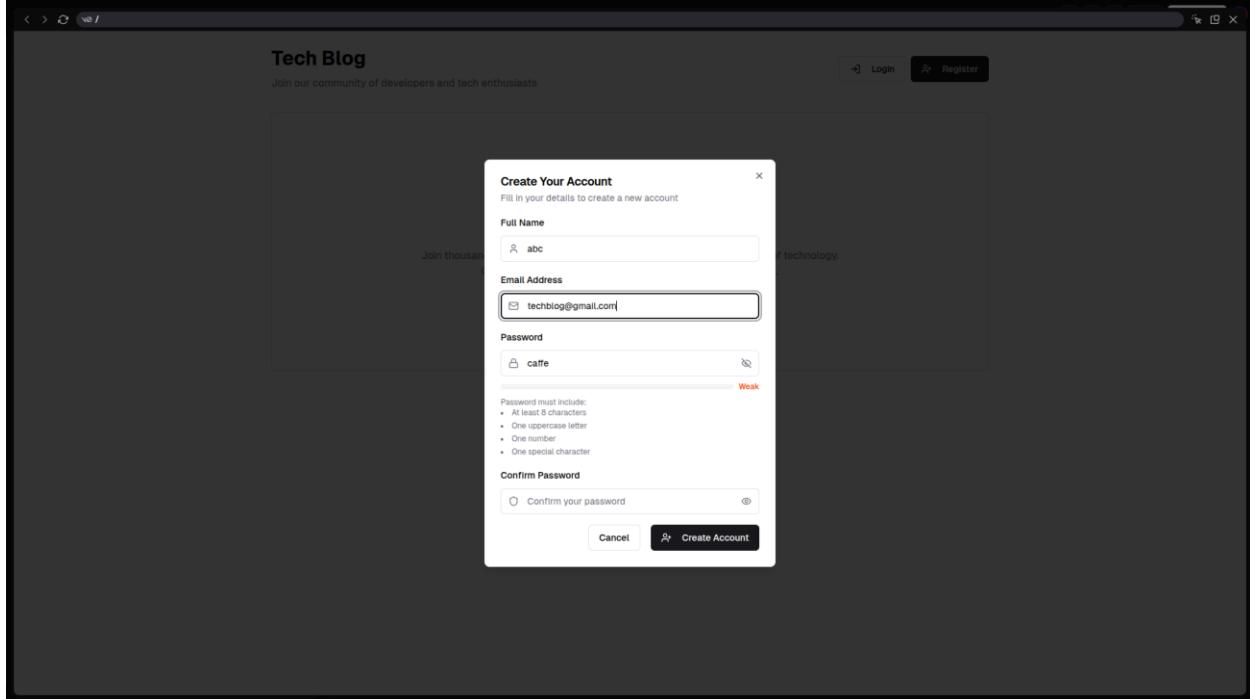


When the user enters a password, he must enter the same in the confirm password box.

with registering, the user must comply with the following requirements: At least 8 characters, one uppercase letter,

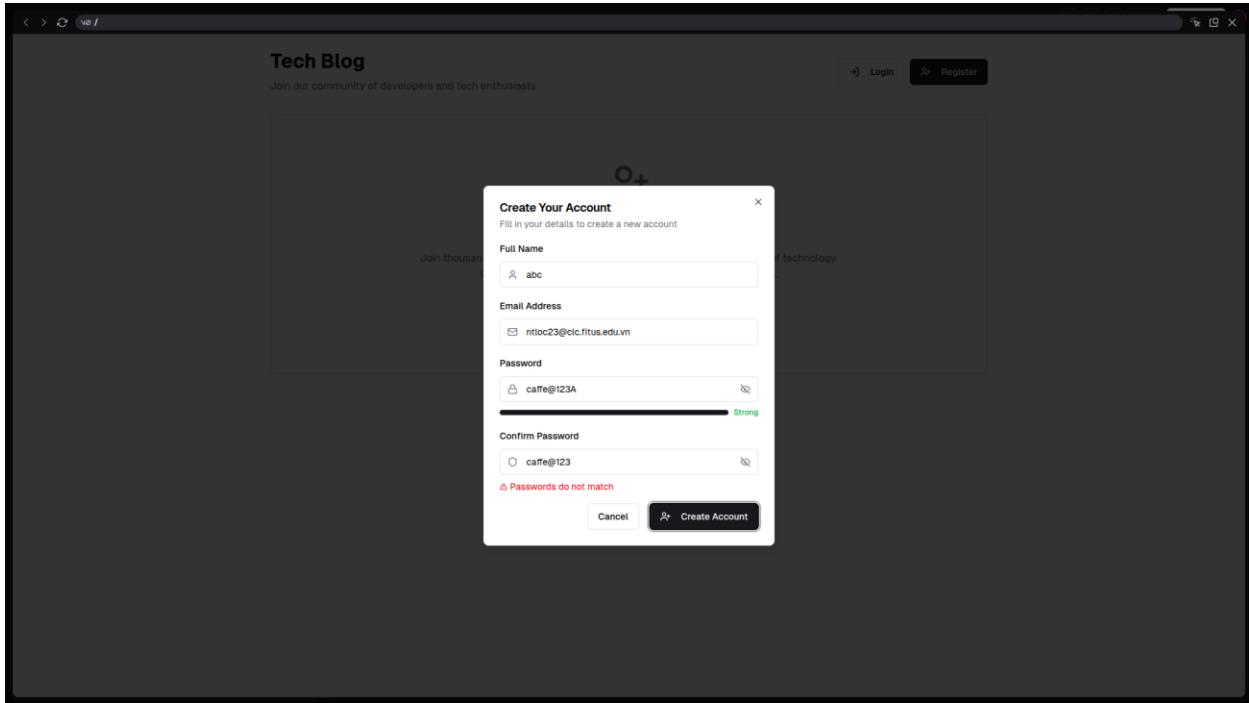
Digital Newspaper Website	Version: 1.0
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one numeric character and one special character.

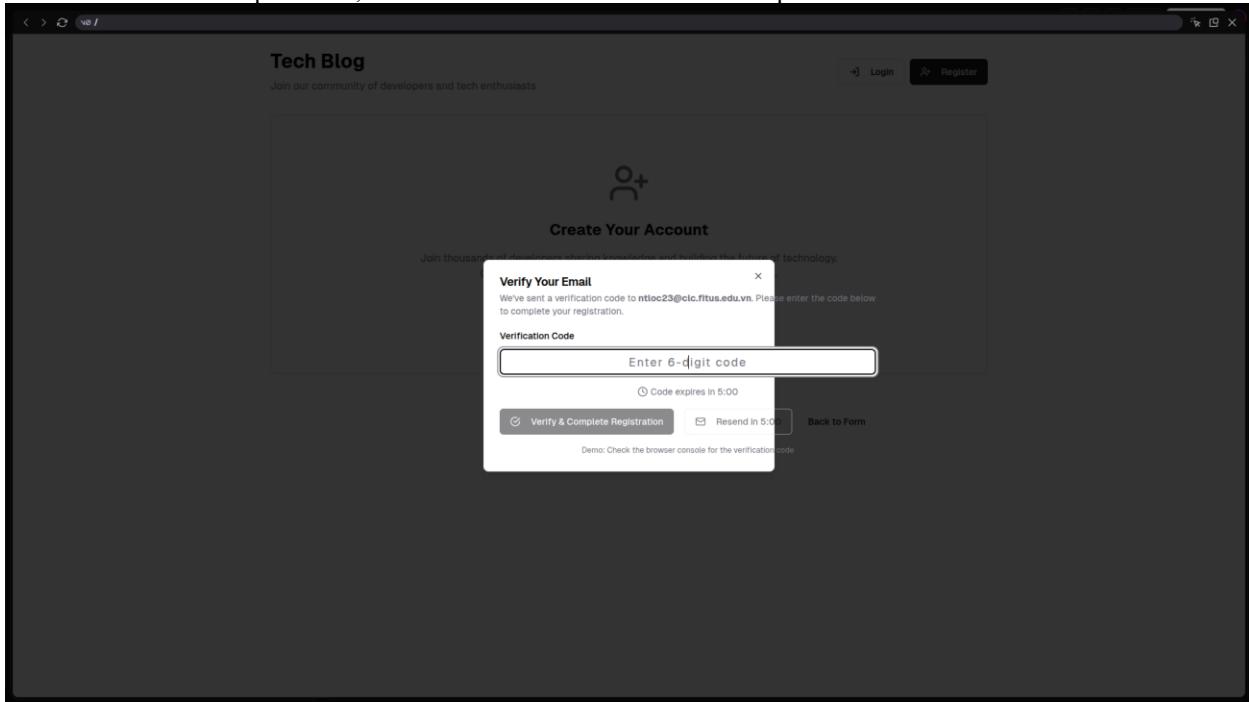


When the user enters a password, he must enter the same in the confirm password box.

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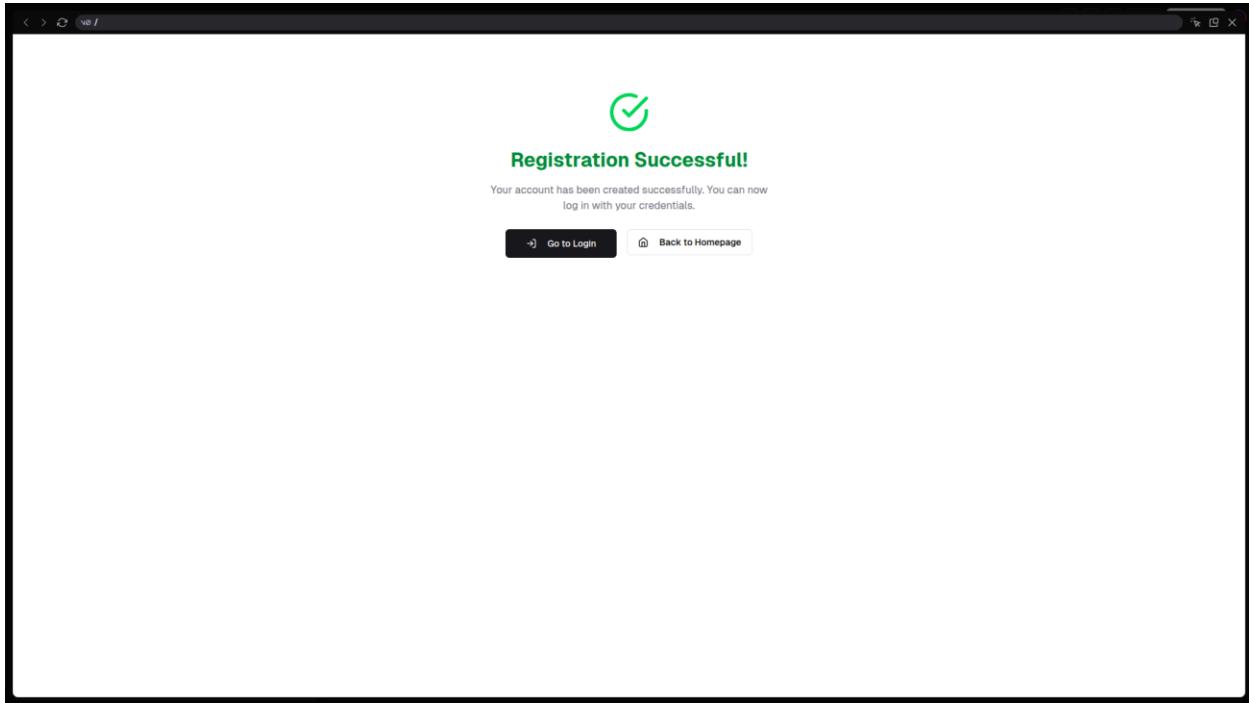


When the user enters a password, he must enter the same in the confirm password box.



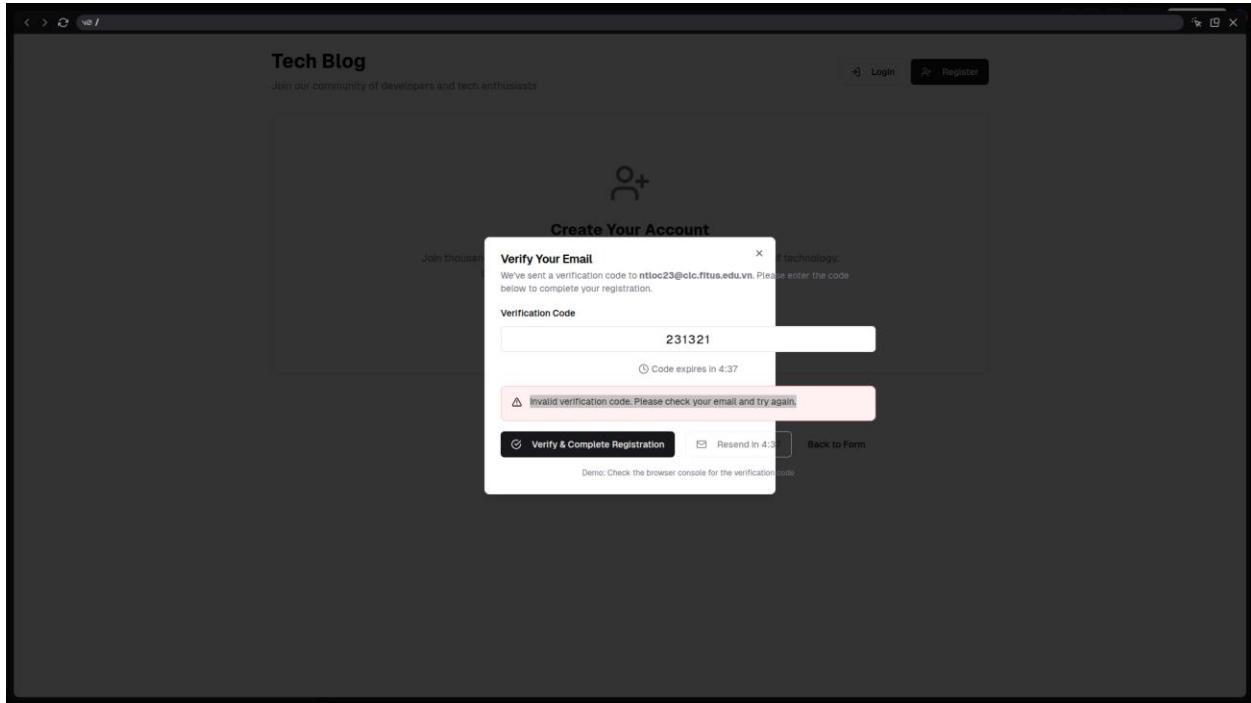
The post code will send to user mail and the user will write that into and click the Verify & Complete Registration button. The system will display a log in page.

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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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404 Not Found

**Digital Newspaper Website
Use-Case Specification: Rate Article**

Version 1.0

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Rate Article	Date: 31/7/2025
UC06	

Revision History

Date	Version	Description	Author
07/07/2025	1.0	Specific about Rate Article use case	Lê Thị Minh Thu

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Rate Article	Date: 31/7/2025
UC06	

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Use-Case Specification: Rate Article

1. Use-Case Name: Rate Article

1.1 Brief Description

This use case describes the functionality that allows users to rate the articles for evaluating the quality of the articles. Ratings help other readers and editors understand how the content is received.

2. Flow of Events

2.1 Basic Flow

1. The user navigates to a specific article.
2. The user scrolls to the rating section and selects a star rating (1 to 5 stars) for the article (main rating).
3. Optionally, the system displays sub-categories for more detailed rating such as image quality, content, accuracy.
4. The user may rate sub-categories or leave them empty.
5. The user clicks to the Submit button for sending their rating..
6. The system checks if at least main rating is selected:
 - a. If yes: rating is submitted
 - b. If not: the Submit button remains disabled.
7. The system stores the rating and the new average rating of the article is updated and displayed.
8. The new rating is shown on the rating section.
9. A confirmation message is shown to the user:
 - a. “Your rating has been submitted”
 - b. Or: “Thank you for your feedback!”

2.2 Alternative Flows

2.2.1 Anonymous Rating

- At step 5, the user chooses to submit the rating anonymously.

2.2.1.1 Anonymous Rating Subflow

1. The user checks the “Rate anonymously” checkbox
2. The system records the rating without linking it to the user’s ID
3. The rating is displayed as submitted by “Anonymous User”.
4. The rest of the rating flow proceeds normally

2.2.2 Incomplete Rating

- At step 6, the user clicks the Submit button without selecting the main rating.
- If only sub-categories are rated and main rating is left empty. The Submit button remains disabled. A tooltip may appear: “Please rate the article overall before submitting”
- If neither the main rating nor sub-categories are selected, no action is allowed.
- If the main rating is selected, regardless of sub-categories, submission proceeds normally.

3. Special Requirements

3.1 System Performance

- Rating submission and average update must complete within **2 seconds** under normal load.
- The system must support concurrent ratings from multiple users without loss or duplication of data.

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3.2 Security & Privacy

- For anonymous ratings, the system must ensure no personally identifiable information is stored with the rating.
- All rating data must be stored securely in accordance with data protection policies

3.3 Rating Integrity

- Each user can rate an article only **once**. Re-rating may be allowed if the previous rating is overwritten.
- Ratings must be protected against bots or automated spam via CAPTCHA.

4. Preconditions

4.1 User Authentication

- The user who wants to rate the articles must have a registered and logged-in account to rate articles.

4.2 Valid Article.

- The article must be visible and allow user interaction(not archived or locked)

5. Postconditions

5.1 Rating result is shown

- If not anonymous: The user's rating is shown with the user's profile (name and avatar) on the rating section.
- If anonymous: The user's rating is shown with the user name "Anonymous user" and their profile is hidden.

5.2 Average rating star of the article changes

- The system recalculates, updates and shows the article's average rating accordingly.

6. Extension Points

6.1 Anonymous Submission Option

- **Location in flow:** After step2 in the Rating flow.
- **Description:** If the user selects to submit anonymously, the system saves the rating without attaching any user identity. The rating will appear in the rating section under the name "Anonymous User", and the rater's profile is hidden.

7. Low Fidelity Prototype For Use Case

7.1 Prompt Used for AI Tool

Create a user interface for rating a news article on a digital newspaper website.

The interface should display:

- The article title at the top.
- A 5-star rating input as the main rating.
- Optional sub-category ratings (e.g., image quality, content quality, accuracy), also using star inputs.
- A checkbox labeled "Rate anonymously".
- A Submit button, which is disabled unless the main rating is selected.
- After submission, display a confirmation message: "Your rating has been submitted" or "Thank you for your feedback!"
- If the user checked "Rate anonymously", show the rating as submitted by "Anonymous User"; otherwise,

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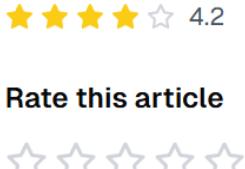
show the user's name and avatar.

- Display the updated average rating of the article after submission.

Make sure the layout is clean and easy to understand, and suitable for both desktop and mobile screens.

7.2 Generated Interface

Breaking: Revolutionary AI Technology Transforms Healthcare Industry

 4.2 • 1247 ratings

Rate this article



Rate specific aspects (optional)

Image Quality	
Content Quality	
Accuracy	

Rate anonymously

Submit Rating

This is the main screen of Rate Article use case

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Rate Article	Date: 31/7/2025
UC06	

Breaking: Revolutionary AI Technology Transforms Healthcare Industry

★★★★★ 4.2 • 1247 ratings

Rate this article

★★★★★ (5/5)

Rate specific aspects (optional)

Image Quality

★★★★★

Content Quality

★★★★★

Accuracy

★★★★★

Rate anonymously

Submit Rating

User choose star on the main rating below “Rate this article”, without choose star at the sub-categories and “Rate anonymously” checkbox, the “Submit Rating” button is valid

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Rate Article	Date: 31/7/2025
UC06	

Breaking: Revolutionary AI Technology Transforms Healthcare Industry

★★★★☆ 4.2 • 1247 ratings

Rate this article



Rate specific aspects (optional)

Image Quality



Content Quality



Accuracy



Rate anonymously

Submit Rating

User choose star on the main rating below "Rate this article" and choose star at sub-categories and "Rate anonymously" checkbox, the "Submit Rating" button is valid

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Rate Article	Date: 31/7/2025
UC06	

Breaking: Revolutionary AI Technology Transforms Healthcare Industry

★★★★★ 4.2 • 1247 ratings

Rate this article

★★★★★ (5/5)

Rate specific aspects (optional)

Image Quality ★★★★★ (5/5)

Content Quality ★★★★★ (5/5)

Accuracy ★★★★☆ (4/5)

Rate anonymously

Submit Rating

User choose star on the main rating below “Rate this article” and choose star at sub-categories, the “Submit Rating” button is valid

Digital Newspaper Website	Version: 1.0
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UC06	

Breaking: Revolutionary AI Technology Transforms Healthcare Industry

★★★★★ 4.2 • 1247 ratings

Rate this article



Rate specific aspects (optional)

Image Quality  (5/5)

Content Quality  (5/5)

Accuracy  (4/5)

Rate anonymously

Submit Rating

User choose stars at sub-categories but doesn't choose stars at the main rating "Rate this article". So that, the "Submit Rating" button is invalid

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Rate Article	Date: 31/7/2025
UC06	

Breaking: Revolutionary AI Technology Transforms Healthcare Industry

★★★★☆ 4.2 • 1247 ratings

Rate this article



Rate specific aspects (optional)

Image Quality



Content Quality



Accuracy



Rate anonymously

Submit Rating

User doesn't chose stars, so the "Submit Rating" button is invalid.

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Rate Article	Date: 31/7/2025
UC06	

Breaking: Revolutionary AI Technology Transforms Healthcare Industry

✓ Thank you for your feedback!

Your Rating



Sarah Johnson (5/5)

Article Rating

4.2 (1248 ratings)

The confirmation message, rating result is shown, average rating and number of ratings is updated and displayed after Submit Rating, and the user name and avatar is displayed when the user doesn't tick at "Rate Anonymously" checkbox.

Digital Newspaper Website	Version: 1.0
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UC06	

Breaking: Revolutionary AI Technology Transforms Healthcare Industry

✓ Thank you for your feedback!

Your Rating



Anonymous User  (1/5)

Article Rating

 4.2 (1248 ratings)

The confirmation message, rating result is shown, average rating and number of ratings is updated and displayed after Submit Rating, and the user name is “Anonymous Usé” and avatar is hidden when the user ticks at “Rate Anonymously” checkbox.

404 Not Found

**Digital Newspaper Website
Use-Case Specification: Share Article**

Version 1.0

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Share Article	Date: 31/7/2025
UC07	

Revision History

Date	Version	Description	Author
18/07/2025	1.0	Specific about Share Article use case	Lê Thị Minh Thu

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Share Article	Date: 31/7/2025
UC07	

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Use-Case Specification: Share Article

1. Use-Case Name: Share Article

1.1 Brief Description

This use case describes the functionality that allows users to share the articles via social media such as Facebooks, Zalo, Instagram,...It provides choosing sharing method (e.g., timeline, private, message) and visibility (e.g. public, private)

2. Flow of Events

2.1 Basic Flow

1. The user views an article on the website.
2. The user scrolls to the end of the article and selects the “Share” option.
3. The system displays a list of available platforms such as Facebook, Zalo, Instagram, Messenger,...
4. The user selects a platform and confirms sharing.
5. The system prompts the user to choose share method options, including:
 - a. Share method: timeline/feed, private message, group.
 - b. Visibility: public, friends, private, or custom.
 - c. Caption or personal message (optional).
6. The article link is shared to the selected platform.
7. A confirmation or error message is shown to the user:
 - a. If successful: “Sharing article successfully!”
 - b. If failed: “Failed to share the article. Please try again later”

2.2 Alternative Flows

2.2.1 User Cancels Sharing

- At step 4, the user cancels before confirming.
- The system returns to the article page without sharing

2.2.2 Social Account Having Been Logged In

- At step 5, if the user has not logged into the selected social media platform.
- The system prompts the user to log in before proceeding with the sharing process.
- If they exit log in, the sharing options will be canceled or fail.

2.2.3 Platform Error

- If an error occurs while sharing(e.g: API failure, no internet connection, invalid token,..)
- The system displays an error message: “Failed to share the article. Please try again later.”
- The user can retry or cancel.

3. Special Requirements

3.1 System Performance

- The sharing operation should complete within 3 seconds under normal conditions.

3.2 Compatibility

- The system must support all major browsers and mobile platforms.

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4. Preconditions

4.1 User Authentication

- The user must be logged in with a registered account.

4.2 Social Media Login

- The user must have logged into a supported social media account (e.g.. Facebook, Instagram,..) when they want to take this sharing action.

5. Postconditions

5.1 Article Shared

- The selected article is successfully shared to the chosen platform, or the user receives an appropriate error message.

6. Extension Points

6.1 Share Method Options

- **Location in flow:** After step 4 in the Basic Flow (user selects a platform and confirms sharing).
- **Description:** Once a platform is selected, the system may allow the user to choose how the article is shared. Depending on each platform, options may include:
 1. Share to timeline/ feed
 2. Send via private message
 3. Share to a group or multiple recipients.
 4. Choose visibility: public, friends, private, or custom by yourself.
 5. Add a personal message or caption.

7. Low Fidelity Prototype For Use Case

7.1 Prompt Used for AI Tool

- Create a responsive web UI for a digital newspaper article page with a “Share Article” feature.
- Requirements: Meets all that have been specified in the use-case specification.
[2. Flow of Event 6.Extension Points] (*Paste the use case specification from section 2 to 6 here*)
- The UI should be mobile-friendly and support modern browsers. Prioritize usability and simplicity.

7.2 Generated Interface

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Share Article	Date: 31/7/2025
UC07	

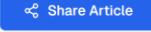
The screenshot shows a digital newspaper website interface. At the top right, there is a 'Welcome, User' message with a blue circular profile icon containing a white letter 'U'. Below the header, a large text area contains a paragraph about patient satisfaction. Underneath this, a section titled 'Related Articles' displays three cards, each with a placeholder image, a title, a snippet, and a '2 min read' duration. A blue 'Share Article' button with a share icon is located at the bottom right of this section. On the far right edge of the screen, there is a vertical scroll bar.

Digital Newspaper

Welcome, User 

patient satisfaction. The system's ability to provide detailed explanations for its diagnostic recommendations has been particularly well-received by healthcare professionals, who appreciate the transparency and educational value.

Enjoyed this article?

Share it with your network and help spread the knowledge 

Related Articles

Related Article Title 1:
Technology Advances in Moder...
2 min read

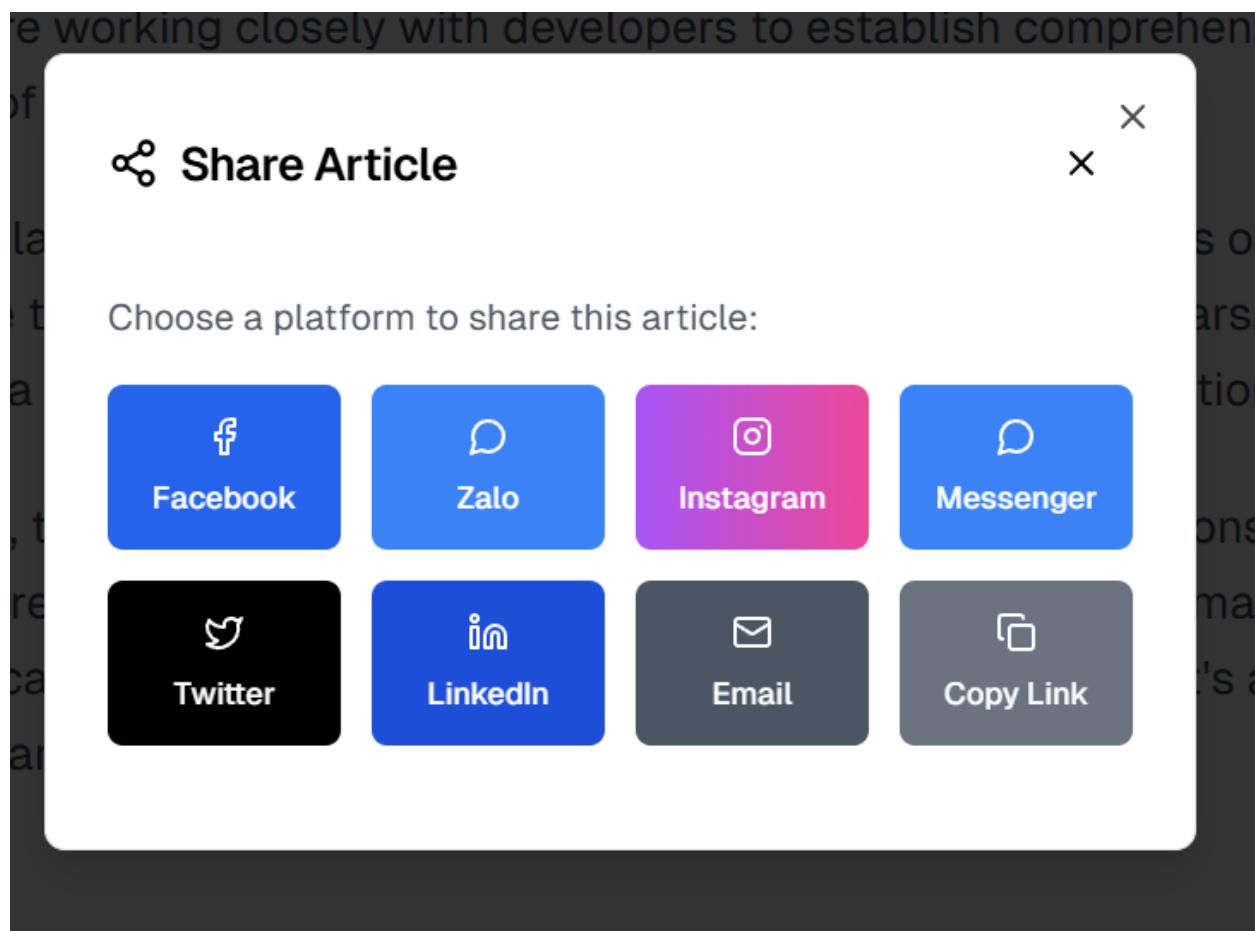
Related Article Title 2:
Technology Advances in Moder...
2 min read

Related Article Title 3:
Technology Advances in Moder...
2 min read

At the end of the article, the Share button is shown in the above picture.

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The Share Article box shown as soon as the user clicks the Share button.

Digital Newspaper Website	Version: 1.0
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UC07	

🔗 Share Article

X

fb Share to Facebook

Article to share:

Revolutionary AI Technology Transforms Healthcare Industry

<https://digitalnews.com/articles/ai-healthcare-revolution-2024>

ⓘ You need to log in to Facebook first

Continue

← Back

After the user clicks to the Facebook platform. If the user hasn't logged in on that platform, the system requires the user to log in Facebook platform "You need to log in to Facebook first". The Back button will lead the user back to the previous screen.

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🔗 Share Article

X

f Login to Facebook

ⓘ You need to log in to Facebook to continue sharing this article.

Username/Email

Enter your username or email

Password

Enter your password

Login & Continue

Cancel

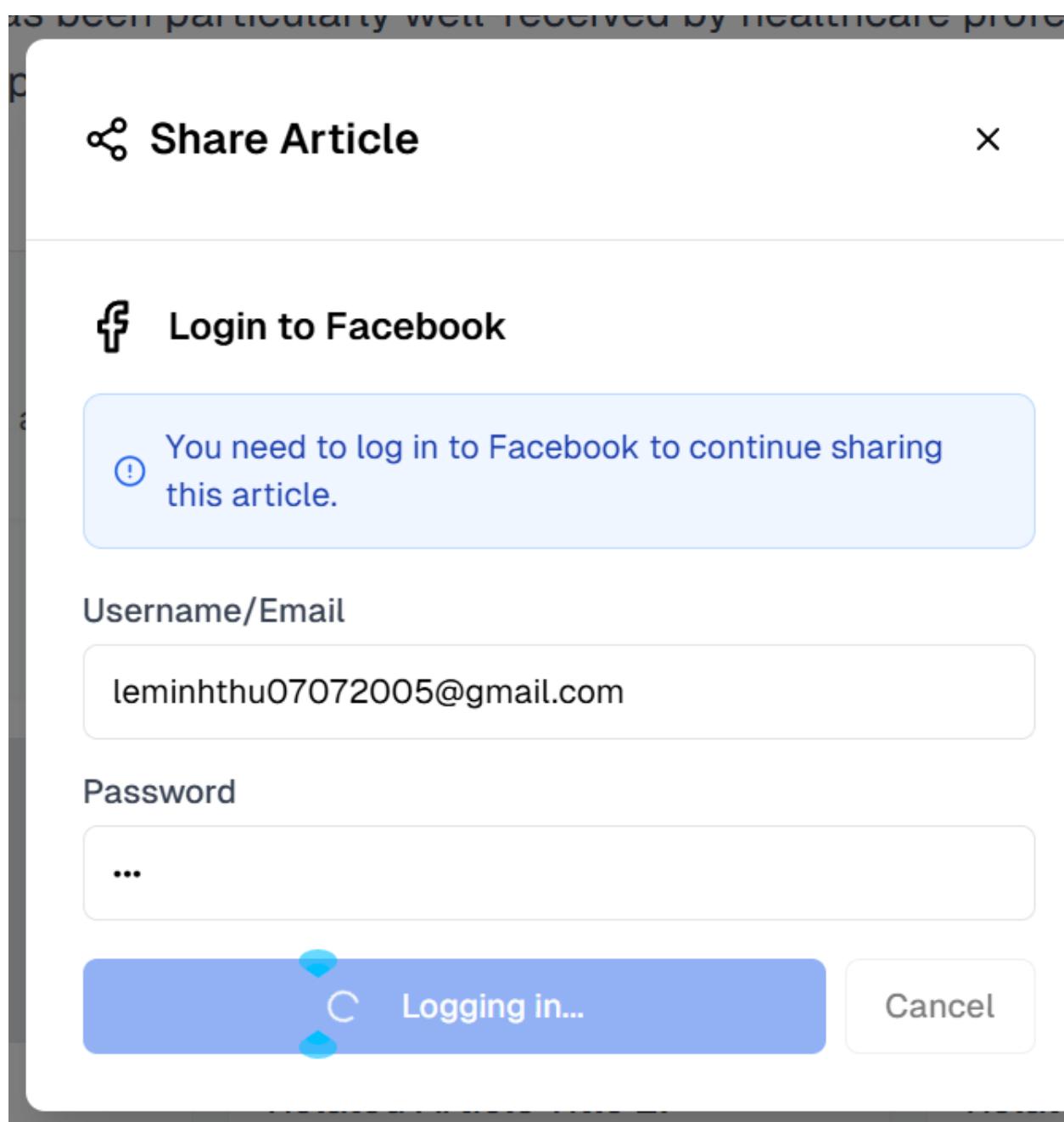
After clicking the Continue button, the Log in Screen is shown. Because no information is input, the Login&Continue button is invalid.

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UC07	



When the user fills all in the Log in screen. Login & Continue button is valid.

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Share Article	Date: 31/7/2025
UC07	



The screen shows as soon as the user has clicked the Login & Continue button.

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Share Article	Date: 31/7/2025
UC07	

🔗 Share Article

X

fb Share Options - Facebook

Share Method

- 🌐 Share to Timeline/Feed
- ⚡ Send as Private Message
- 📂 Share to Group

Visibility

🌐 Public



Caption (Optional)

Add a caption...

0/500 characters

🔗 Share Now

← Back

Digital Newspaper Website	Version: 1.0
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The screen after the system has just processed the Login processing. The default sharing method is Public and share to Feed/Timeline.

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🔗 Share Article

X

fb Share Options - Facebook

Share Method

- 🌐 Share to Timeline/Feed
- ✉️ Send as Private Message
- ☰ Share to Group

Visibility

🌐 Public



Caption (Optional)

Hi, I'm Le Thi Minh Thu

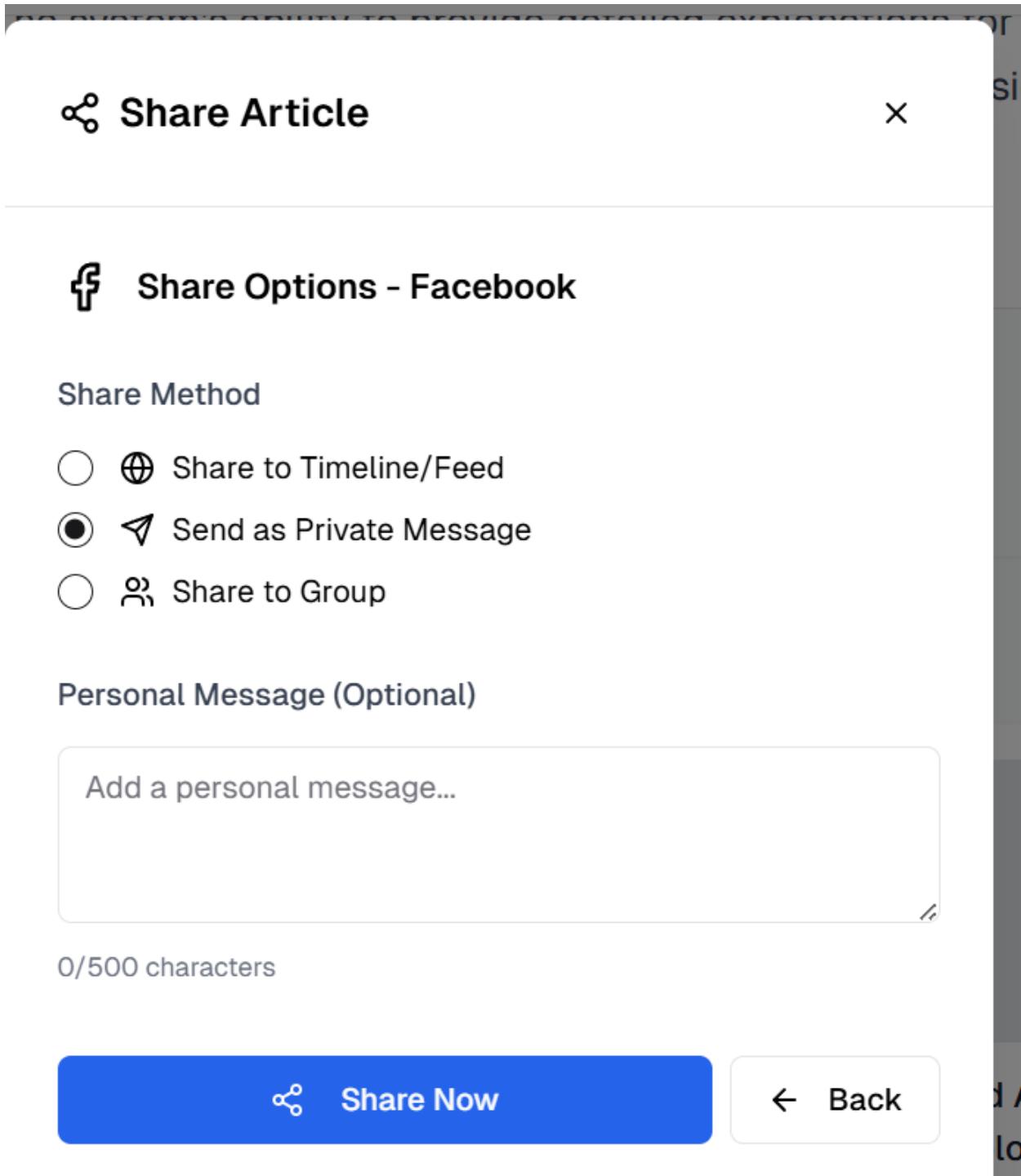
23/500 characters

🔗 Share Now

← Back

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The users can add captions for their Sharing Article posts.



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UC07	

🔗 Share Article

X

f Share Options - Facebook

Share Method

-  Share to Timeline/Feed
-  Send as Private Message
-  Share to Group

Visibility

 Public



Caption (Optional)

Add a caption...

0/500 characters



Share Now

← Back

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Or the user can choose to share for a specific group/ Send as Private Message.

Digital Newspaper Website	Version: 1.0
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UC07	

🔗 Share Article

X

fb Share Options - Facebook

Share Method

- 🌐 Share to Timeline/Feed
- 📨 Send as Private Message
- 🧑 Share to Group

Visibility

⚙️ Custom



Custom Visibility

- Close Friends
- Family
- Colleagues
- Specific Friends

Caption (Optional)

Digital Newspaper Website	Version: 1.0
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The users can Custom their Sharing Visibility

Digital Newspaper Website	Version: 1.0
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 Share to Timeline/Feed

 Send as Private Message

 Share to Group

Visibility

 Custom ▼

Custom Visibility

Close Friends

Family

Colleagues

Specific Friends

Caption (Optional)

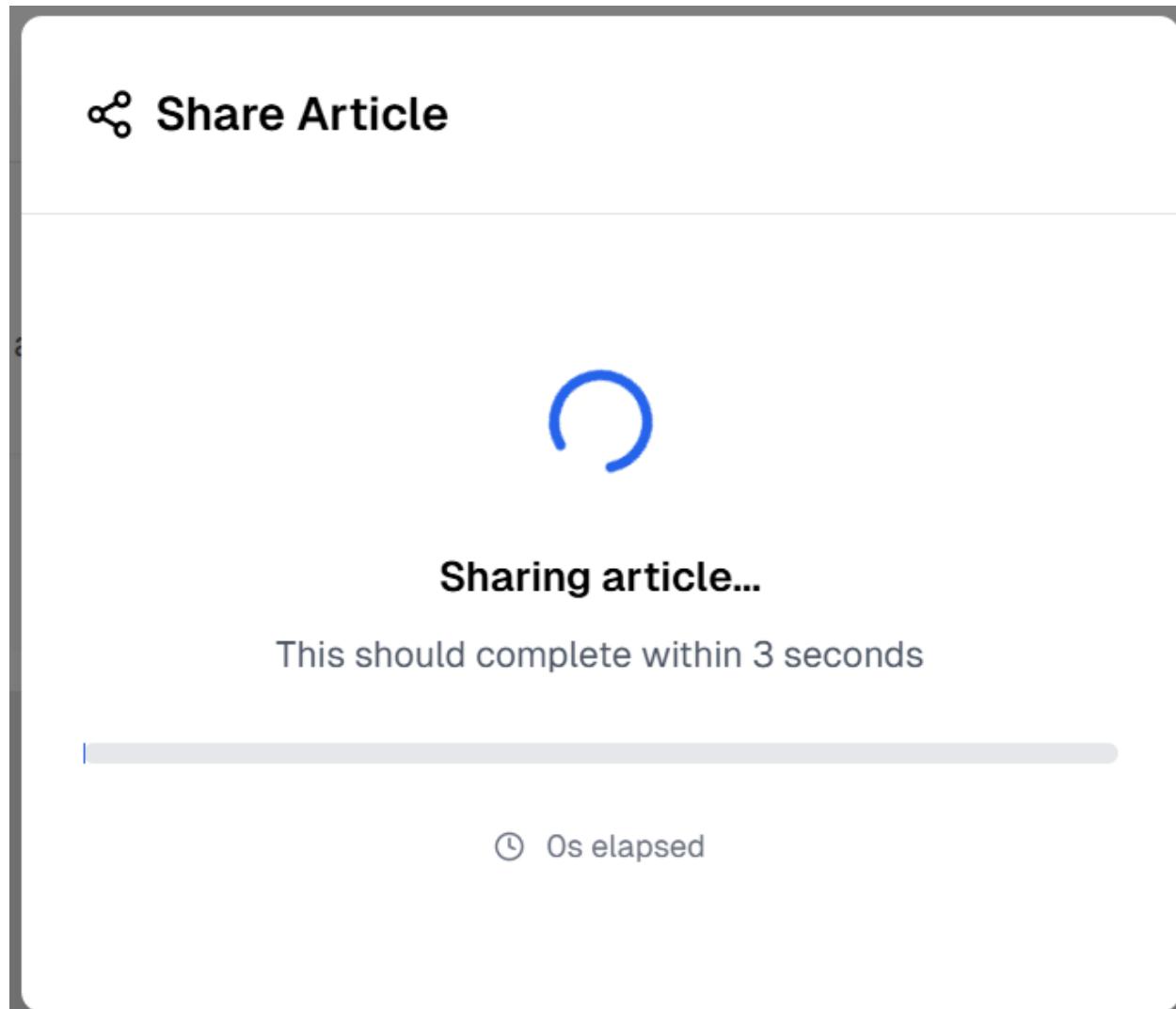
Add a caption...

0/500 characters

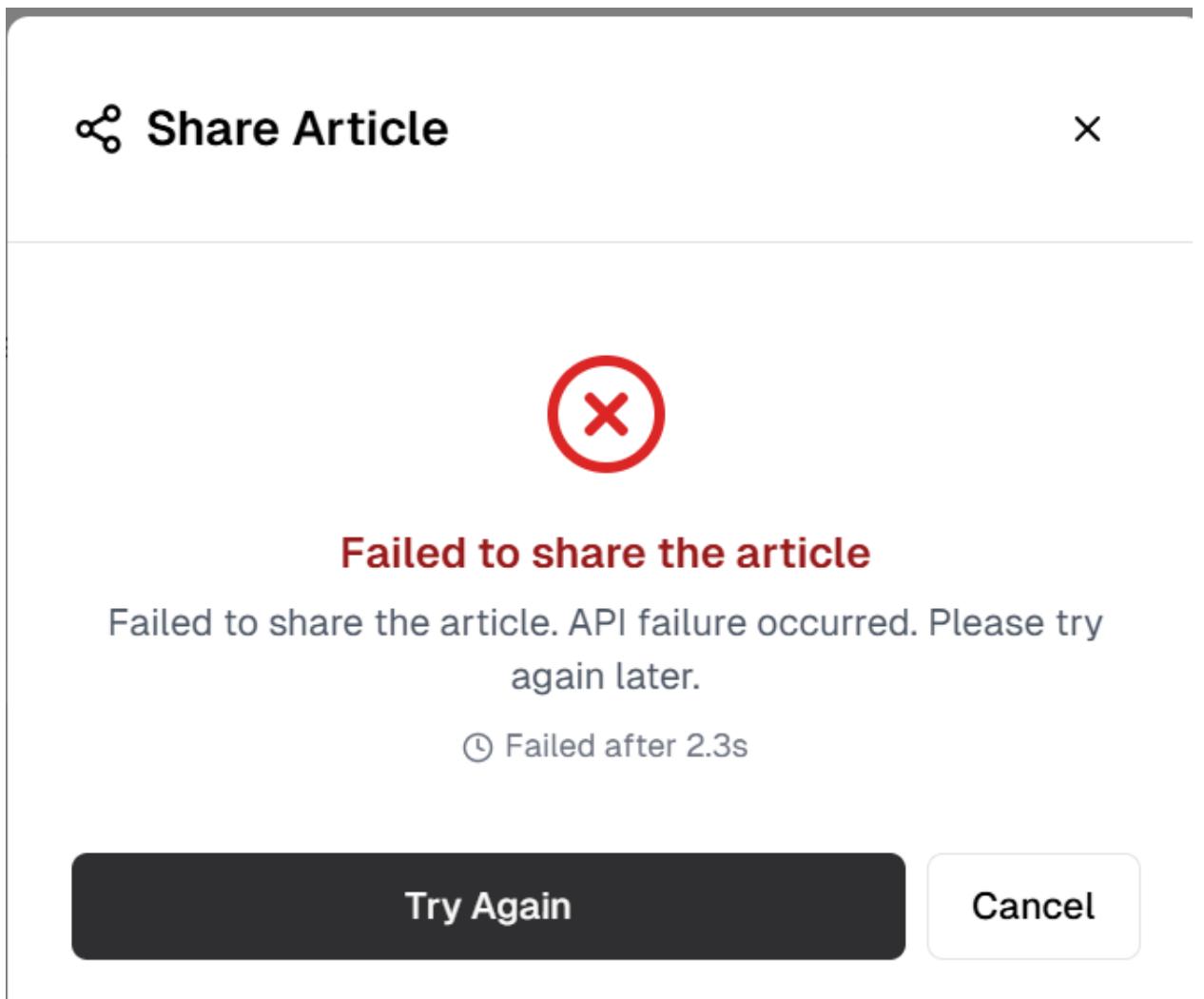
 Share Now

 Back

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The system sends an error message “Failed to share the article”, and the mistake occurs (e.g API). The Cancel will lead the user go back to the Multiple Platform Selections screen (screen after clicking the Share button).

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Use-Case Specification: Share Article	Date: 31/7/2025
UC07	

🔗 Share Article

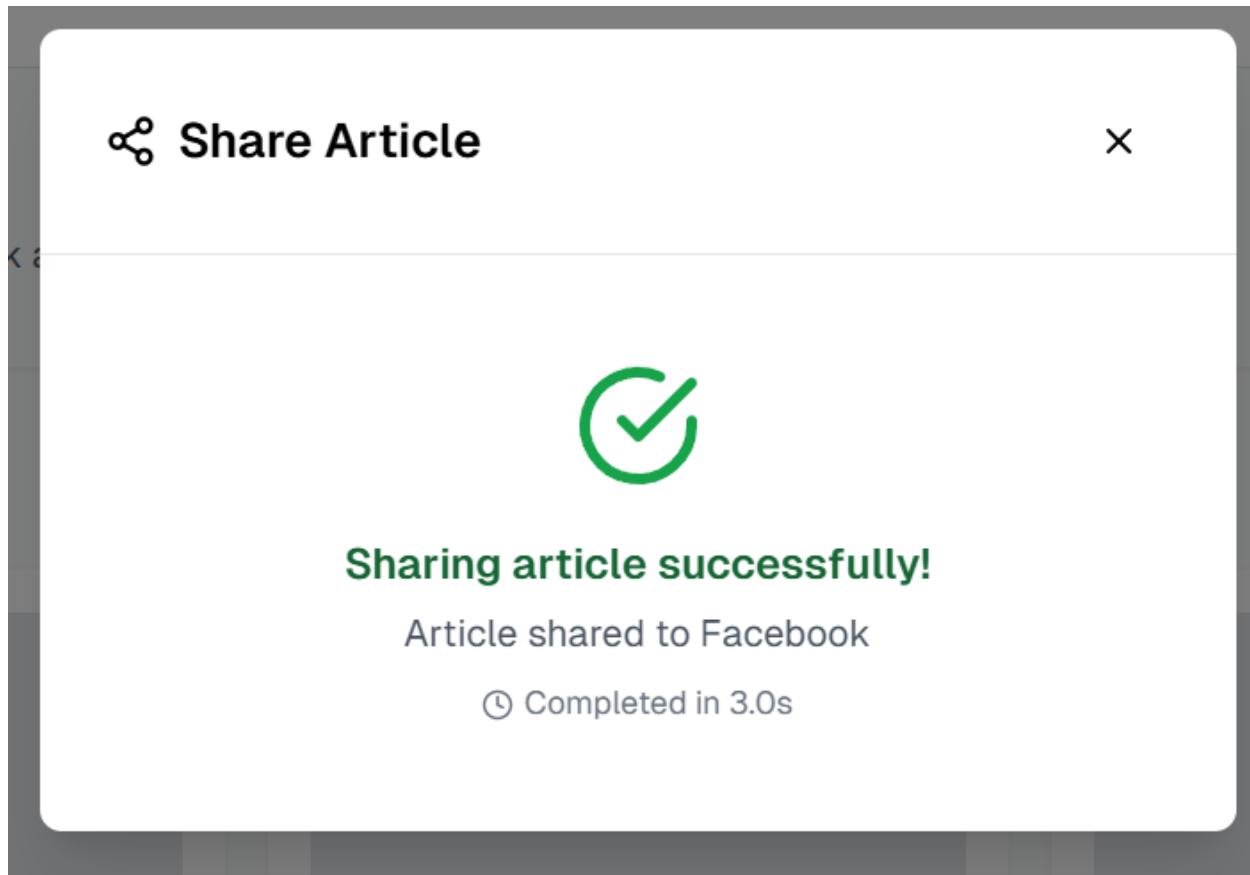


Sharing article...

This should complete within 3 seconds

⌚ 0s elapsed

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The system messages “Sharing article successfully!” straight after the article has been shared.

7.2.1 .
7.2.2 .

404 Not Found

**Digital Newspaper Website
Use-Case Specification: Save Article to Favourite**

Version 1.0

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Save Article to Favourite	Date: 31/7/2025
UC08	

Revision History

Date	Version	Description	Author
20/06/2025	1.0	Specific about the Save Article to Favourite use case	Thạch Ngọc Hân

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Save Article to Favourite	Date: 31/7/2025
UC08	

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3.1 Performance: The save operation should complete within 1 second.	4
3.2 Data Integrity: Prevent duplication of favourite records for the same article and user.	4
4. Preconditions	4
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5.1 The article appears in the user's list of favourite articles.	5
6. Extension Points	5
6.1 Allows the user to unfavourite a previously saved article.	5

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UC08	

Use-Case Specification: Save Article to Favourite

1. Use-Case Name: Save Article to Favourites

1.1 Brief Description

This use case describes the process by which a logged-in user saves an article to their list of favourites. This enables the user to easily access preferred content later via their personal profile or favourites section.

2. Flow of Events

2.1 Basic Flow

1. The use case begins when the user views an article.
2. The user clicks the “Save to Favourite” button associated with the article.
3. The system checks whether the user is authenticated.
4. The system adds the article to the user’s list of Favourite articles in the database.
5. The system confirms the save with a notification such as “Article saved to favourites”
6. The use case ends

2.2 Alternative Flows

2.2.1 Alternative Flow 1: User Not Logged In

At step 3 in the Basic Flow, if the user is not authenticated:

- a. The system redirects the user to the login page or displays a login prompt.
- b. After successful login, the system redirects the user back to the article.
- c. The user may then proceed to save the article.

2.2.2 Alternative Flow 2: Article Already in Favourites

At step 4 in the Basic Flow, if the article is already in the user’s favourites:

- a. The system displays a message: “This article is already in your favourites.”
- b. The use case ends without duplicating the entry.

3. Special Requirements

3.1 Performance

The save operation should complete within 1 second.

3.2 Data Integrity

Prevent duplication of favourite records for the same article and user.

3.3 Security

Only authenticated users can add favourites; all actions must be logged for audit.

4. Preconditions

4.1

The article must be published and visible to the user.

4.2

The user must be authenticated (or be prompted to authenticate).

5. Postconditions

5.1

The article appears in the user’s list of favourite articles.

5.2

The system confirms success or notifies if the article is already saved.

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6. Extension Points

- 6.1 Allows the user to unfavourite a previously saved article.

Original interface

The screenshot shows a digital newspaper website with a dark header bar containing the logo 'Digital Times' and a 'Login' button. Below the header, a news article is displayed. The article title is 'The Future of Sustainable Technology: How Green Innovation is Reshaping Industries'. Above the title, it says 'Technology · 2024-01-15'. To the right of the title is a 'Save to Favourites' button. Below the title is a brief description: 'Exploring the latest breakthroughs in sustainable technology and their impact on global industries, from renewable energy to eco-friendly manufacturing processes.' Underneath the description, it says 'By Sarah Johnson · 8 min read · 12,543 views'. At the bottom of the article card, there are 'Like' and 'Share' buttons.

If you are not logged in and click the "Save to Favorite" button, the system will ask you to log in.

The screenshot shows the same digital newspaper website as the previous one, but with a 'Login Required' modal window overlaid. The modal has a title 'Login Required' and a message 'Please log in to save articles to your favourites.' It contains two input fields: 'Email' (with placeholder 'Enter your email') and 'Password' (with placeholder 'Enter your password'). Below the fields are 'Login' and 'Cancel' buttons. The background of the website is dimmed to indicate that interaction with the page is disabled until the login is completed.

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Interface after successful login

The screenshot shows a digital newspaper website interface. At the top, there is a header with the logo "Digital Times" and a user profile for "John Doe". Below the header, a green notification box displays the message "Successfully logged in!". The main content area features an article titled "The Future of Sustainable Technology: How Green Innovation is Reshaping Industries" under the "Technology" category, published on "2024-01-15". The article summary states: "Exploring the latest breakthroughs in sustainable technology and their impact on global industries, from renewable energy to eco-friendly manufacturing processes." Below the article, it says "By Sarah Johnson" and "8 min read" and "12,543 views". At the bottom of the article card, there are "Like" and "Share" buttons. To the right of the article card, there is a "Save to Favourites" button.

After saving successfully, a notification will appear. The notification will disappear after a few seconds.

The screenshot shows the same digital newspaper website interface as the previous one. After saving the article to favourites, a green notification box appears with the message "Article saved to favourites". The rest of the page content is identical to the first screenshot, including the article title, author, and sharing options.

404 Not Found

**Digital Newspaper Website
Use-Case Specification: View Reading History**

Version 1.0

Digital Newspaper Website	Version: 1.0
Use-Case Specification: View Reading History	Date: 31/7/2025
UC09	

Revision History

Date	Version	Description	Author
20/06/2025	1.0	Specific about View Reading History use case	Thạch Ngọc Hân

Digital Newspaper Website	Version: 1.0
Use-Case Specification: View Reading History	Date: 31/7/2025
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Use-Case Specification: View Reading History	Date: 31/7/2025
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Use-Case Specification: View Reading History

1. Use-Case Name: View Reading History

1.1 Brief Description

This use case allows a logged-in user to view a list of articles they have previously read. The history provides links to past articles and may include metadata such as title, author and read date to improve user personalization.

2. Flow of Events

2.1 Basic Flow

1. The use case begins when the user navigates to the "Reading History" page from their profile or main menu.
2. The system checks if the user is authenticated.
3. The system retrieves the list of articles previously read by the user from the database, sorted by the most recent activity.
4. The system displays the reading history, including article titles, authors and timestamps.
5. The user may click on any listed article to view it again.
6. The use case ends.

2.2 Alternative Flows

2.2.1 No Reading History

At step 3 of the Basic Flow, if no reading data is found:

- a. The system displays the message: "You haven't read any articles yet."
- b. The use case ends.

3. Special Requirements

3.1 Data Privacy

1. Reading history must be stored securely and accessible only to the authenticated user.
2. The system must comply with data protection regulations
3. History data should be automatically removed after a defined retention period, if required by privacy policy.

4. Preconditions

4.1

The user must be logged in to access personal reading history.

5. Postconditions

5.1

The reading history page is populated with previously accessed article records, or a notice is shown if none exist.

6. Extension Points

6.1 Clear Reading History

- Location: After step 4 of the Basic Flow.
- Description: The user may choose to delete their entire reading history via a "Clear History" button. The system confirms the action before deletion.

You must log in to view history

Digital Newspaper Website	Version: 1.0
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The screenshot shows the 'Reading History' section of the website. At the top, there's a header with a profile icon and the name 'John Doe'. Below the header, it says '5 articles read' and has a 'Clear History' button. Two articles are listed:

- The Future of Sustainable Technology: How Green Innovation is Reshaping Industries** (Technology category) - A summary of sustainable technology breakthroughs.
- Global Economic Trends: What to Expect in 2024** (Business category) - An analysis of emerging economic patterns.

After clicking delete history, it will confirm again if you really want to delete.

The screenshot shows the same 'Reading History' section as before, but with a modal dialog box in the center asking for confirmation to clear the reading history. The dialog has 'Cancel' and 'Clear History' buttons. The background articles are partially visible.

Interface after deleting all history

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 **Reading History**

 John Doe



No Reading History Yet

You haven't read any articles yet. Start exploring our content to build your reading history!

[Browse Articles](#)

404 Not Found

**Digital Newspaper System
Use-Case Specification: View Statistics**

Version 1.0

Digital Newspaper Website	Version: 1.0
Use-Case Specification: View Statistics	Date: 31/7/2025
UC10	

Revision History

Date	Version	Description	Author
18/07/2025	1.0	Specific about View Statistics use case	Thạch Ngọc Hân

Digital Newspaper Website	Version: 1.0
Use-Case Specification: View Statistics	Date: 31/7/2025
UC10	

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4. Preconditions	4
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5. Postconditions	4
6. Extension Points	4
6.1 Edit/Delete Review	4

Digital Newspaper Website	Version: 1.0
Use-Case Specification: View Statistics	Date: 31/7/2025
UC10	

Use-Case Specification: View Statics

1. Use-Case Name: View Statics

1.1 Brief Description

This use case allows an editor, admin, or writer to view analytics and statistics related to article performance, user engagement, or platform activity. These may include metrics such as article views, likes, shares and comments.

2. Flow of Events

2.1 Basic Flow

1. The use case begins when the user navigates to the Statistics Dashboard from their profile or admin panel.
2. The system verifies the User's role and permissions.
3. The user selects the type of statistics they want to view (e.g., by article, author, date range, or category).
4. The system retrieves relevant data from the analytics database.
5. The system generates and displays visualizations such as charts, tables, or summary cards.
6. The user may interact with filters or drill-down options for deeper analysis.
7. The use case ends

2.2 Alternative Flows

2.2.1 No Data Available

At step 4 of the Basic Flow, if no statistics are found for the selected criteria:

- a. The system displays the message: "No statistics available for the selected range."
- b. The user may choose a different date range or filter to continue.

3. Special Requirements

3.1 Performance and Visualization

1. Statistics must load within 3 seconds for standard date ranges.
2. Visuals should be responsive, accessible, and interactive
3. System must prevent access to restricted or sensitive data

4. Preconditions

4.1

The user must be logged in with the role of Editor, Admin, or Author.

5. Postconditions

5.1

The requested statistics are shown in a clear, visual format, and the user can derive insights from them.

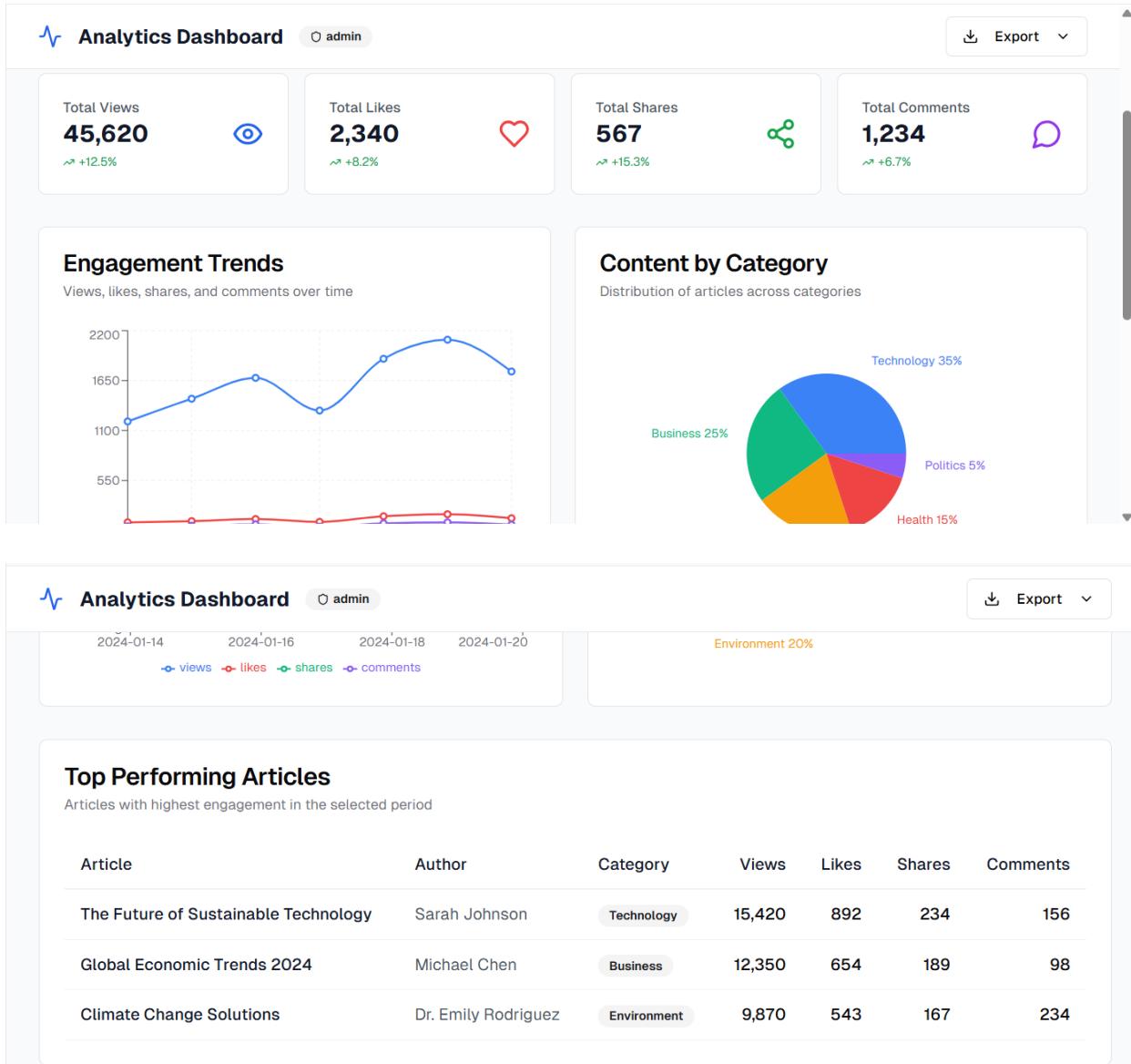
6. Extension Points

6.1 Edit/Delete Review

- Location: After step 5 of the Basic Flow.
- Description: The user may export current statistics in formats like CSV, PDF, or Excel for offline analysis or reporting.

Only when logged in as admin can view

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Filters to see more details

Digital Newspaper Website	Version: 1.0
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Analytics Dashboard admin Export

Filters

Time Range	Category	Author	View Type
Last 7 days	All Categories	All Authors	Overview
<input checked="" type="checkbox"/> Last 7 days			
Last 30 days			
Last 3 months			
Last year			

Total Likes
2,340
↗ +8.2%

Total Shares
567
↗ +15.3%

Total Comments
1,234
↗ +6.7%

Engagement Trends

Views, likes, shares, and comments over time

Content by Category

Distribution of articles across categories

Filters

Time Range	Category	Author	View Type
Last 7 days	All Categories	All Authors	Overview
<input checked="" type="checkbox"/> All Categories			
Total Views	Technology		
45,620			
↗ +12.5%	Business		
	Environment		
	Health		

Total Views
45,620
↗ +12.5%

Total Shares
567
↗ +15.3%

Total Comments
1,234
↗ +6.7%

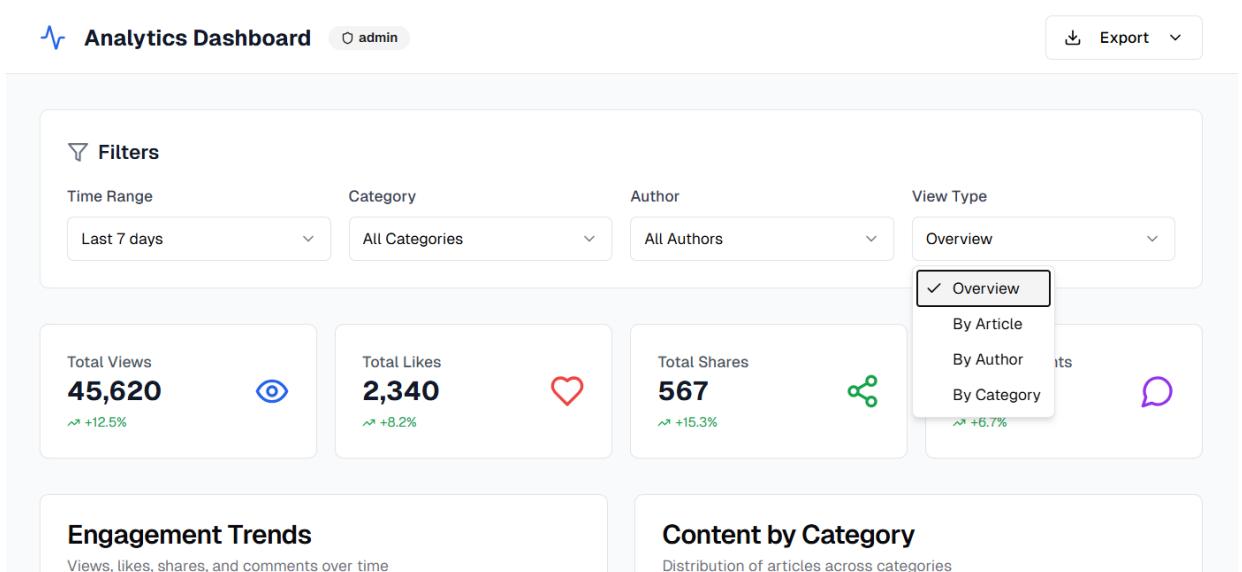
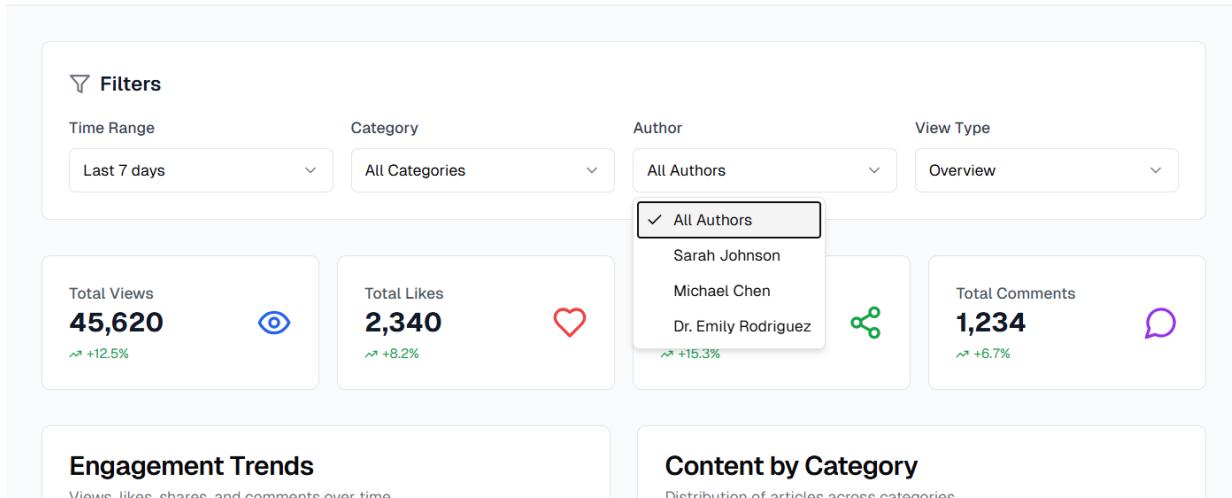
Engagement Trends

Views, likes, shares, and comments over time

Content by Category

Distribution of articles across categories

Digital Newspaper Website	Version: 1.0
Use-Case Specification: View Statistics	Date: 31/7/2025
UC10	



Different types of filters can be downloaded.

Digital Newspaper Website	Version: 1.0
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The screenshot shows a digital newspaper's analytics dashboard. At the top, there are date filters from 2024-01-14 to 2024-01-20, with specific metrics for views, likes, shares, and comments. A dropdown menu labeled 'Export' offers options to 'Export as CSV', 'Export as Excel', or 'Export as PDF'. Below this, a section titled 'Top Performing Articles' displays three entries:

Article	Author	Category	Views	Likes	Shares	Comments
The Future of Sustainable Technology	Sarah Johnson	Technology	15,420	892	234	156
Global Economic Trends 2024	Michael Chen	Business	12,350	654	189	98
Climate Change Solutions	Dr. Emily Rodriguez	Environment	9,870	543	167	234

404 Not Found

**Digital Newspaper Website
Use-Case Specification: Search Articles**

Version 1.0

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Search Article	Date: 31/7/2025
UC11	

Revision History

Date	Version	Description	Author
07/07/2025	1.0	Specific about Search Articles use case	Lê Thị Minh Thu

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Search Article	Date: 31/7/2025
UC11	

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Digital Newspaper Website	Version: 1.0
Use-Case Specification: Search Article	Date: 31/7/2025
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Use-Case Specification: Search Articles

1. Use-Case Name: Search Articles

1.1 Brief Description

This use case describes the functionality that allows users to search the articles by keywords, authors, tags or categories. It also allows users to combine multiple attributes for searching (e.g. Searching by keyword, tag and author, or searching by all attributes)

2. Flow of Events

2.1 Basic Flow

1. The user enters a keyword, author, tag or category into the search bar.
2. The user clicks the Search button or hits “Enter”.
3. The system validates the input.
4. The system queries the article database
5. The system displays a list of matching articles with default sorted by relevance or date.

2.2 Alternative Flows

2.2.1 User Submits Empty Search

- At step 2, if the user submits an empty search:
- The system displays an error message: "Please enter a search keyword." The current page remains unchanged.

2.2.2 The Input Keyword Too Long

- At step 1, if the user input a keyword exceeding the allowed character limit (more than 200 characters)
- The system displays an error message: "The keyword is too long".
- It automatically ignores any characters beyond the 200th. Or if the search keyword is entered via **copy-paste**, the system only accepts the first 200 characters and truncates the rest..

2.2.3 No matching result

- At step 5, if no articles match:
- The system displays a message: "No articles found. Please try another keywords"

2.2.4 Autocomplete or Suggestions.

- At step 1, when the user is typing in the search bar:

2.2.4.1 Autocomplete or Suggestions SubFlows

1. The system suggests keywords or article titles.
2. The user can either:
 - a. Select a suggestion from the dropdown, or
 - b. Press “Tab” to choose the current suggestion (shown in gray in the search bar).
3. The selected suggestion replaces the current input.
4. The remaining steps in the Basic Flow continue as usual. (from Step2)

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3. Special Requirements

3.1 System Performance

- The system should return search results within 2 seconds for queries with up to 3 combined filters (e.g., keyword + tag + author).
- Autocomplete suggestions should appear in less than 500 milliseconds after the user types each character.

3.2 Scalability

- The system should handle at least 1,000 concurrent search requests

4. Preconditions

4.1 The article database is available.

5. Postconditions

5.1 A list of relevant articles is displayed to the user.

5.2 If no match is found, a "No results found" message is shown.

5.3 The user can click on a result to view the full article.

6. Extension Points

6.1 Autocomplete or Suggestions

- **Location in flow:** Step 1 (when the user is typing in the search bar)
- **Description**
 - + As the user types into the search bar, the system provides real-time suggestions based on popular keywords, article titles, or search history..
 - + Users can select a suggestion or press **Tab** to autocomplete.
 - + The selected suggestion replaces the input and the flow resumes at **Step 2**.

7. Low Fidelity Prototype For Use Case

7.1 Prompt Used for AI Tool

- Create a responsive web UI for a digital newspaper article page with a “Search Article” feature.
- Requirements: Meets all that have been specified in the use-case specification.
[2. Flow of Event 6.Extension Points] (*Paste the use case specification from section 2 to 6 here*)
- The UI should be mobile-friendly and support modern browsers. Prioritize usability and simplicity.

7.2 Generated Interface

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Digital Newspaper

The screenshot shows the main interface of the Digital Newspaper website. At the top, there is a search bar with placeholder text "Search articles by keyword, author, tag, or category..." and a "Search" button. Below the search bar, a navigation bar includes "Latest News" and "Stay updated with the latest stories". On the right side of the navigation bar are dropdown menus for "All Categories" and "Sort by: Latest". The main content area features a large image placeholder for a news article, followed by a detailed news card. The news card has a "Featured" badge, the title "Revolutionary AI Technology Transforms Healthcare Industry", the author "Dr. Sarah Chen", the date "March 15, 2024", the reading time "8 min read", and the views "12.5k". Below the title is a summary: "In a groundbreaking development that promises to reshape the healthcare landscape, researchers at leading medical institutions have unveiled a revolutionary artificial intelligence system that can diagnose complex medical conditions with unprecedented accuracy." The news card also includes category tags "Technology", "AI", and "Healthcare", and a "Share" button.

The main screen of the website, the Search bar is shown as above.

Digital Newspaper

The screenshot shows the main interface of the Digital Newspaper website. At the top, there is a search bar with a magnifying glass icon and a "Search" button. Below the search bar, a navigation bar includes "Latest News" and "Stay updated with the latest stories". On the right side of the navigation bar are dropdown menus for "All Categories" and "Sort by: Latest". The main content area features a large image placeholder for a news article, followed by a detailed news card. The news card has a "Featured" badge, the title "Revolutionary AI Technology Transforms Healthcare Industry", the author "Dr. Sarah Chen", the date "March 15, 2024", the reading time "8 min read", and the views "12.5k". Below the title is a summary: "In a groundbreaking development that promises to reshape the healthcare landscape, researchers at leading medical institutions have unveiled a revolutionary artificial intelligence system that can diagnose complex medical conditions with unprecedented accuracy." The news card also includes category tags "Technology", "AI", and "Healthcare", and a "Share" button.

Typing space characters in the Search bar.

Digital Newspaper

The screenshot shows the main interface of the Digital Newspaper website. At the top, there is a search bar with a magnifying glass icon and a "Search" button. Below the search bar, a message in red text says "Please enter a search keyword.". The main content area features a large image placeholder for a news article, followed by a detailed news card. The news card has a "Featured" badge, the title "Revolutionary AI Technology Transforms Healthcare Industry", the author "Dr. Sarah Chen", the date "March 15, 2024", the reading time "8 min read", and the views "12.5k". Below the title is a summary: "In a groundbreaking development that promises to reshape the healthcare landscape, researchers at leading medical institutions have unveiled a revolutionary artificial intelligence system that can diagnose complex medical conditions with unprecedented accuracy." The news card also includes category tags "Technology", "AI", and "Healthcare", and a "Share" button.

After clicking the Search button when the user has just input space characters. The system message error “Please enter a search keyword.”

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Digital Newspaper

The user has typed 'ne' into the search bar. A suggestion 'renewable energy' is displayed below the search bar. The search results indicate 45 articles found.

The user retypes the search keyword. The keyword suggestion (if exists) is displayed below.

Digital Newspaper

The user has typed 'renewable energy' into the search bar. A suggestion 'renewable energy' is displayed below the search bar.

The user Tab to get the first keyword suggestion.

Digital Newspaper

The user has typed 'renewable energy' into the search bar. A suggestion 'renewable energy' is displayed below the search bar. Below the search bar, the text 'Searching...' is visible, followed by a blue running circle icon and the text 'Searching articles...'. This indicates that the search process is currently active.

After clicking the Search button, the Search process is processing (the Running Circle)

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Digital Newspaper

The screenshot shows a search results page for the term "renewable energy". The search bar at the top contains "renewable energy" with 16/200 results. The results are sorted by Date. The first result is an article titled "Climate Change Solutions: New Renewable Energy Breakthrough" by Dr. Michael Rodriguez, published on March 14, 2024, with a 6 min read time and 9.8k views. The article summary discusses a new solar panel technology achieving up to 47% efficiency. Below the article are category tags: Environment, Climate Change, Renewable Energy, Solar Power, and +1 more.

The results is shown after searching.

Digital Newspaper

The screenshot shows the same search results page as above, but with a dropdown menu open under the "Sort by: Date" button. The menu includes options: Relevance, Date (which is selected), and Popularity.

The user can select the index in the Sort by box to Filter the articles by Date, Relevance or Popularity.

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Digital Newspaper

Search Results

In case that the Input Keywords access 200 characters, no character is added after that, even if the user types directly or uses the “Copy-Paste” method.

Digital Newspaper

Searching...

Searching articles...

The system is processing the Search process.

Digital Newspaper

Search Results

No articles found

Please try another keywords

In case no article is found with the Searching Keywords, the screen displayed “No article found” as above.

404 Not Found

**Digital Newspaper Website
Use-Case Specification: Filter Articles**

Version 1.0

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Filter Articles	Date: 31/7/2025
UC12	

Revision History

Date	Version	Description	Author
18/07/2025	1.0	Specific about Filter Articles use case	Thạch Ngọc Hân

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Filter Articles	Date: 31/7/2025
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3.1 Performance	4
4. Preconditions	5
4.1 The article listing page with filtering options must be fully loaded and interactive.	5
5. Postconditions	5
5.1 The screen shows only those articles that meet the selected criteria, or a “no results” message if none match.	5
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6.1 Save Filter Preferences	5

Digital Newspaper Website	Version: 1.0
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Use-Case Specification: Filter Articles

1. Use-Case Name: Filter Articles

1.1 Brief Description

This use case allows a user to filter the list of available articles based on selected criteria such as category, tag, author, publication date, or keyword. It enhances user experience by narrowing down content to match interests or search queries.

2. Flow of Events

2.1 Basic Flow

1. The use case begins when the User navigates to the article listing or search page.
2. The User selects one or more filter criteria.
3. The User clicks the “Apply Filters” button.
4. The System validates the selected filter criteria.
5. The System queries the article database based on the filter parameters.
6. The System returns a list of articles that match the filters.
7. The System displays the filtered list to the User
8. The use case ends.

2.2 Alternative Flows

2.2.1 Filter with No Results

At step 6 in the Basic Flow, if no articles match the criteria:

- a. The system displays a message: “No articles found matching your filters.”
- b. The user is given the option to reset filters or modify them.
- c. The flow returns to step 2 of the Basic Flow.

2.2.2 Invalid Filter Input

At step 4 in the Basic Flow, if filter input is invalid (e.g., incorrect date format):

- a. The system highlights the invalid fields and displays an error message.
- b. The user corrects the input.
- c. The flow resumes from step 3 of the Basic Flow.

3. Special Requirements

3.1 Performance

1. The system should return filtered results within 2 seconds.
2. Filtering must work on both desktop and mobile views responsively.

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4. Preconditions

- 4.1 The article listing page with filtering options must be fully loaded and interactive.

5. Postconditions

- 5.1 The screen shows only those articles that meet the selected criteria, or a “no results” message if none match.

6. Extension Points

6.1 Save Filter Preferences

- Location: after step 7 of the Basic Flow
- Description: allows the user to save the current filter settings for reuse in future sessions.

Original interface

Article Library

The screenshot shows the 'Article Library' interface. On the left, there is a sidebar titled 'Filters' containing the following fields:

- Search Articles: A search bar with placeholder text 'Search by title, content, or author.'
- Category: A dropdown menu set to 'All Categories'.
- Author: A dropdown menu set to 'All Authors'.
- Tags: Two checkboxes, 'Sustainability' and 'Innovation', both unchecked.

On the right, the main area displays a heading '6 Articles Found' above two article cards. The first card, under the 'Technology' category (published Jan 20, 2024), has the title 'The Future of Sustainable Technology: How Green...' and a snippet about sustainable technology. The second card, under the 'Business' category (published Jan 19, 2024), has the title 'Global Economic Trends: What to Expect in 2024' and a snippet about emerging economic patterns.

Filters available

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Article Library

6 Articles Found

All Categories

- [Technology](#)
- [Business](#)
- [Environment](#)
- [Workplace](#)
- [Health](#)

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An in-depth analysis of emerging economic patterns and their implications for businesses and investors worldwide.

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- [Sarah Johnson](#)
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An in-depth analysis of emerging economic patterns and their implications for businesses and investors worldwide.

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Filter Articles	Date: 31/7/2025
UC12	

Article Library

Author: All Authors

Tags: Innovation, Green Tech, Environment, Economics, Finance. Filtered by innovation x green tech x.

Publication Date: Select date range

Articles:

- Dr. Emily Rodriguez - 10 min read. Tags: climate change, carbon, solutions, +1 more.
- James Wilson - 7 min read. Tags: remote work, corporate culture, productivity, +1 more.

Article Library

Future Of-Work, AI, Healthcare, Medical Technology.

Publication Date: Select date range

Buttons: Apply Filters, Reset Filters, Save Preferences

Articles:

- Healthcare article by Dr. Lisa Park (9 min read) with tags: ai, healthcare, medical technology, +1 more.
- Technology article by Alex Thompson (8 min read) with tags: cybersecurity, threats, business, +1 more.

Interface after applying filter does not exist

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Filter Articles	Date: 31/7/2025
UC12	

Article Library

Filters

Search Articles

Category

Author

Tags Sustainability Innovation

0 Articles Found

Showing results for your current filters

No articles found matching your filters

Try adjusting your search criteria or removing some filters to see more results.

After saving the filter it will suggest again.

Article Library

Filters

Search Articles

Category

Author

Tags Healthcare Medical Technology

Environment • Jan 18, 2024

Climate Change Solutions: Innovative Approaches to...

Examining cutting-edge technologies and policies designed to combat climate change and reduce carbon emissions.

Dr. Emily Rodriguez • 10 min read

climate change carbon
 solutions +1 more

Workplace • Jan 17, 2024

The Rise of Remote Work: Transforming Corporate Culture

How remote work is fundamentally changing the way companies operate and employees collaborate in the modern workplace.

James Wilson • 7 min read

remote work corporate culture
 productivity +1 more

404 Not Found

**Digital Newspaper Website
Use-Case Specification: Change Password**

Version 1.0

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Change Password	Date: 31/7/2025
UC13	

Revision History

Date	Version	Description	Author
18/07/2025	1.0	Specific about Change Password use case	Lê Thị Minh Thu

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Use-Case Specification: Change Password

1. Use-Case Name: Change Password

1.1 Brief Description

This use case describes the functionality that allows users to change their current password to a new one in the system.

2. Flow of Events

2.1 Basic Flow

1. The user navigates to the Change Password section through access to the **Setting & Privacy** via their **Profile Information**.
2. The system checks whether **Multi-Factor Authentication (MFA)** is required:
 - a. If yes, the user is prompted to enter a verification code (via SMS, email, or authenticator).
 - b. The user enters the code.
 - c. The system verifies the code before proceeding.
 - d. If the code is valid and not expired, the flow proceeds.
3. The system displays a form requiring:
 - a. Current password
 - b. New password
 - c. Confirm new password
4. The user fills in all fields and submits the form.
5. The system verifies:
 - a. The current password is correct.
 - b. The new password meets format/ security requirements:
 - i. At least 8 characters.
 - ii. Contains at least one number.
 - iii. Includes at least one special notation.
 - iv. Includes both uppercase and lowercase letters.
 - c. The new password matches the confirmation.
 - d. The new password is NOT the same as the old password.
6. If all checks pass, the system updates the password.
7. The system displays a success message: "Your password has been changed."
8. After a successful password change, the system prompts the user: "Do you want to log out from other devices?"
 - a. If the user selects "Yes", the system logs the user out from all other active sessions except the current one.
 - b. If the user selects "No", the current session continues as usual.

2.2 Alternative Flows

2.2.1 Invalid Current Password

- At step 4.a, if the current password entered is incorrect:
- The system displays an error: "Incorrect password".
- The system will go to the step 3 of the **Basic flows** to allow retry.

2.2.2 The New Password does not meet format/ security requirements.

- At step 4.b, if the new password fails format/security rules:

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- Depending on the inputting mistakes, the system displays an error:
 - + The password must contain at least one special notation (#, @, \$, ..)
 - + The password must contain at least one number (0,1,..9)
 - + The password must contain at least one uppercase letter (A, B, C,..)
 - + The password must contain at least one lowercase letter (a, b, c,..)
 - + The password must have at least 8 characters.
- The flow returns to **Step 3**.

2.2.3 *The Confirmation Password and New Password are not the same.*

- At step 4.c, if the new password and confirmation do not match:
- The system displays an error: "Password confirmation does not match."
- The flow returns to **Step 3**.

2.2.4 *User Cancels the Operation*

- At any point before submission, if the user cancels the operation:
- The system closes the form and returns to the **Settings & Privacy** page, and no changes are made.

2.2.5 *The New and Old Passwords are the Same.*

- If the new password is identical to the current one:
- The system displays an error: "New password must be different from the current password."
- The flow returns to **Step 3**.

2.2.6 *MFA Verification Failed*

- At Step 2.b, if the entered OTP is invalid:

2.2.6.1 *MFA Verification Failed Subflows*

1. Show error: "Invalid verification code."
2. Allow the user to retry (max 3 attempts).
3. After 3 failed attempts, temporarily lock the password change process for 5 minutes.
4. The system returns to step 3 of the basic flows.

2.2.7 *MFA Code Expired*

- At Step 2.b, if the OTP has expired:

2.2.7.1 *MFA Code Expired Subflows*

- Show error: "Verification code has expired."
- Provide a button **Resend Code**
- Return to the OTP entry step after resending.

3. Special Requirements

3.1 Security Requirement

- Passwords must be stored using secure hashing algorithms (e.g: **SHA-256 with salt**) to ensure data protection and prevent password breaches.
- The system must prevent password reuse and brute-force attacks.

3.2 System Performance

- Password update operation should complete within 2 seconds under normal load.
- Error messages must appear within 500 milliseconds of validation failure.
- The system should handle simultaneous password change requests for up to 500 users without performance

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degradation.

4. Preconditions

4.1 UserAuthentication

- The user must be logged in to their account.

4.2 Setting Access

- The Settings & Privacy section is accessible from the user's profile.

5. Postconditions

5.1 Password Successfully Updated

- The user's password is securely updated and stored.

5.2 Confirmation Displayed

- A success message is shown: "**Your password has been changed.**"

5.3 Optional Device Logout

- If the user chooses to log out from other devices, all other sessions are terminated except the current one.

6. Extension Points

6.1 Validate Password Format

- **Location in flow:** Step 5 of the Basic Flow
- **Description:** The system checks whether the new password meets the format requirements and security criteria.

6.2 Perform Multi-Factor Authentication MFA

- **Location in flow:** After Step 1 (user accesses Change Password section)
- **Description:** The system may require additional verification such as OTP before proceeding to display the form, depending on user settings or risk evaluation.

6.3 Prompt Device Logout

- **Location in flow:** After step 6 of Basic Flow
- **Description:** The system asks whether the user wants to log out of other devices. If yes, the system ends all other active sessions.

7. Low Fidelity Prototype For Use Case

7.1 Prompt Used for AI Tool

- Create a responsive web UI for a digital newspaper article page with a "Change Password." feature.
- Requirements: Meets all that have been specified in the use-case specification.
[2. Flow of Event 6.Extension Points] (*Paste the use case specification from section 2 to 6 here*)
- The UI should be mobile-friendly and support modern browsers. Prioritize usability and simplicity.
- The system must show OTP code verification, show expired time, message error and allow it to try again.

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7.2 Generated Interface

Digital Newspaper

The screenshot shows a news article titled "Revolutionary AI Technology Transforms Healthcare Industry" by Dr. Sarah Chen, published on March 15, 2024, with an 8-minute read time. The article discusses a groundbreaking AI system developed by medical institutions that can diagnose complex medical conditions with unprecedented accuracy. It highlights the collaboration between top universities and healthcare providers using advanced machine learning algorithms.

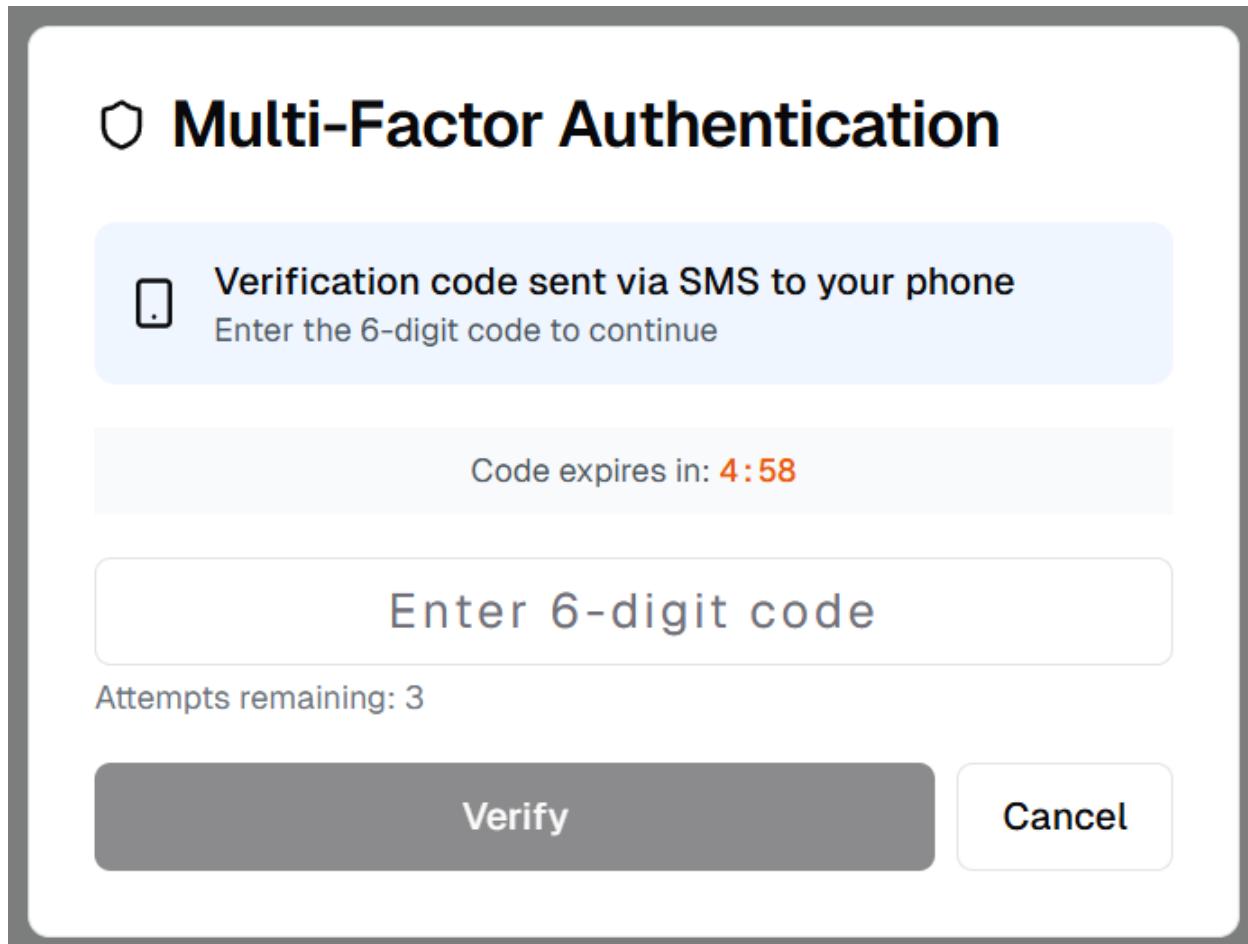
The main screen of the main website

← Settings & Privacy

The screenshot shows the "Settings & Privacy" page. The "Profile Information" section displays a placeholder profile picture for "Sarah Johnson" and her email "sarah.johnson@email.com", with a "Edit Profile" button. The "Security Settings" section includes a "Password" field with a "Change Password" button, and a "Multi-Factor Authentication" section with a "Manage" button.

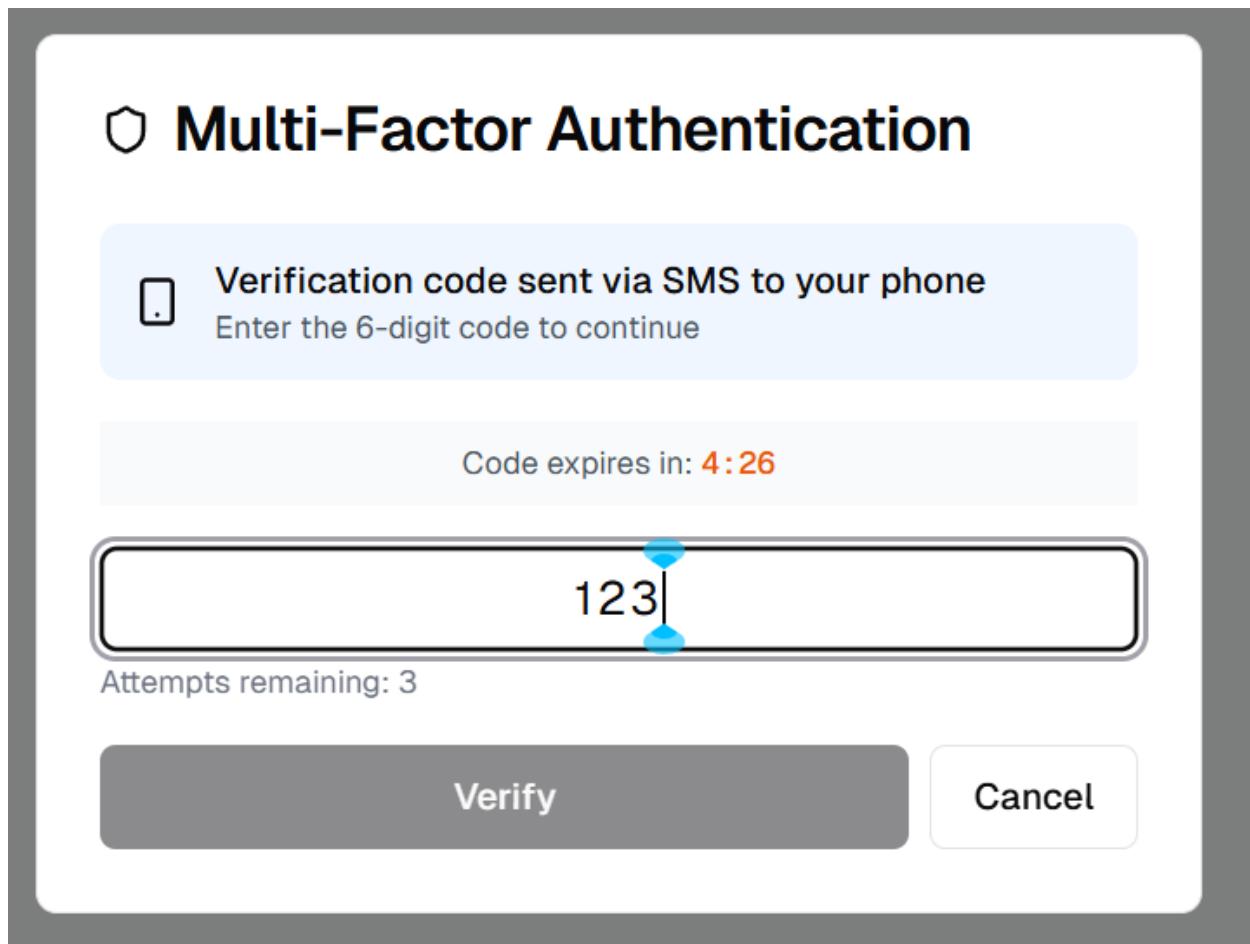
Here are the Profile Information after the user click to their profile symbol. At the Security Setting has a Change Password button.

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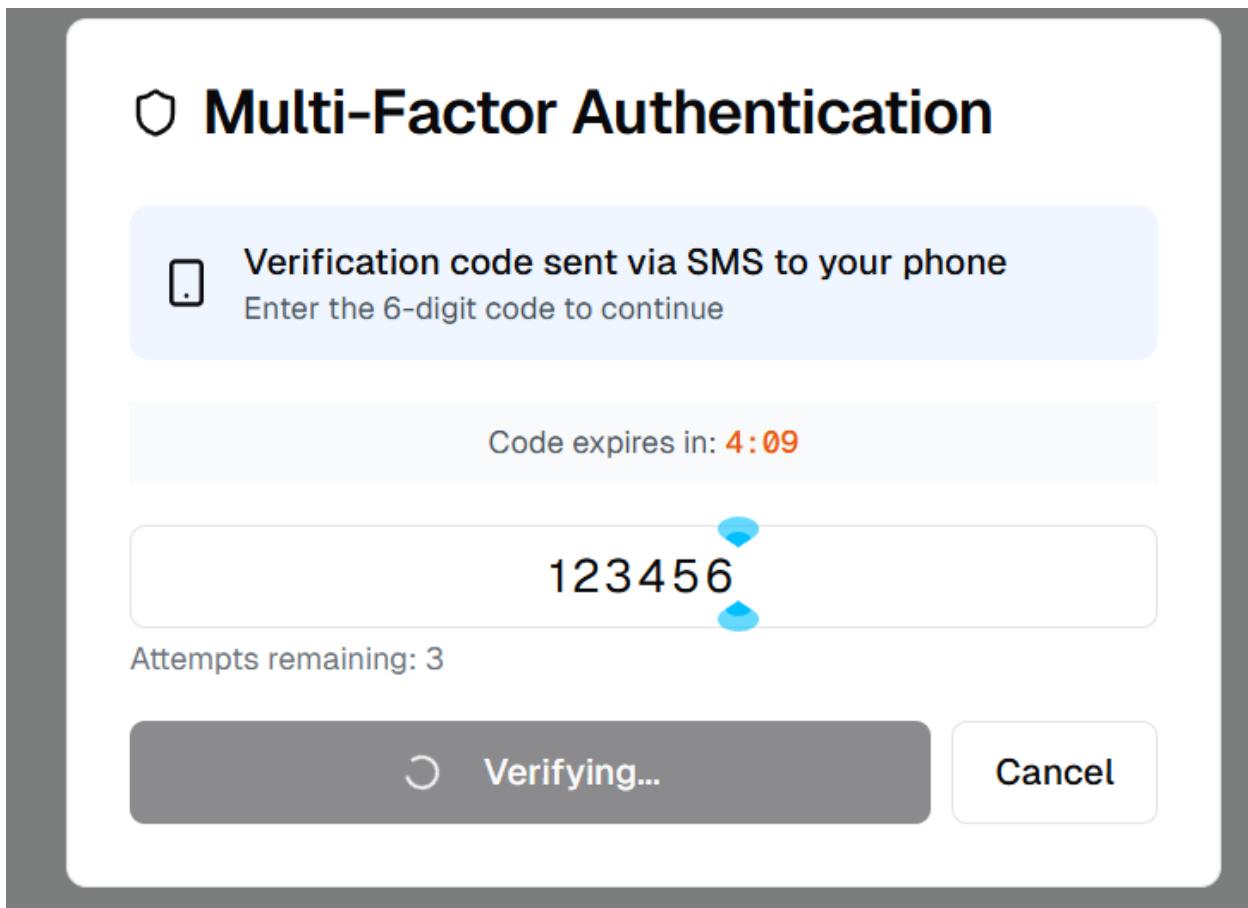
Here is the main screen after clicking the Change Password button. The OTP code hasn't input yet, so the Verify button is invalid

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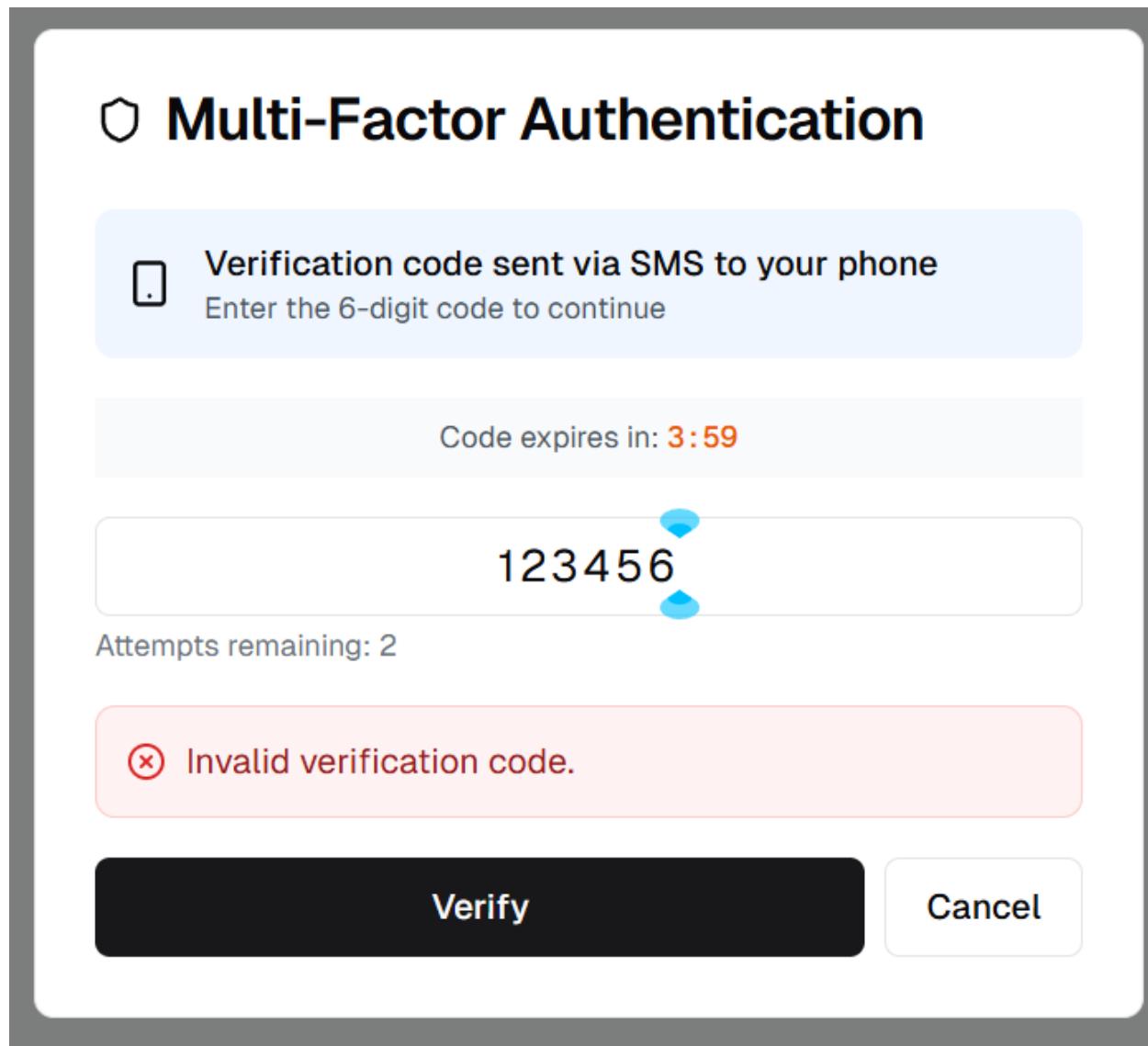


The OTP code is input, but the length is not equal to 6, so the Verify button is invalid

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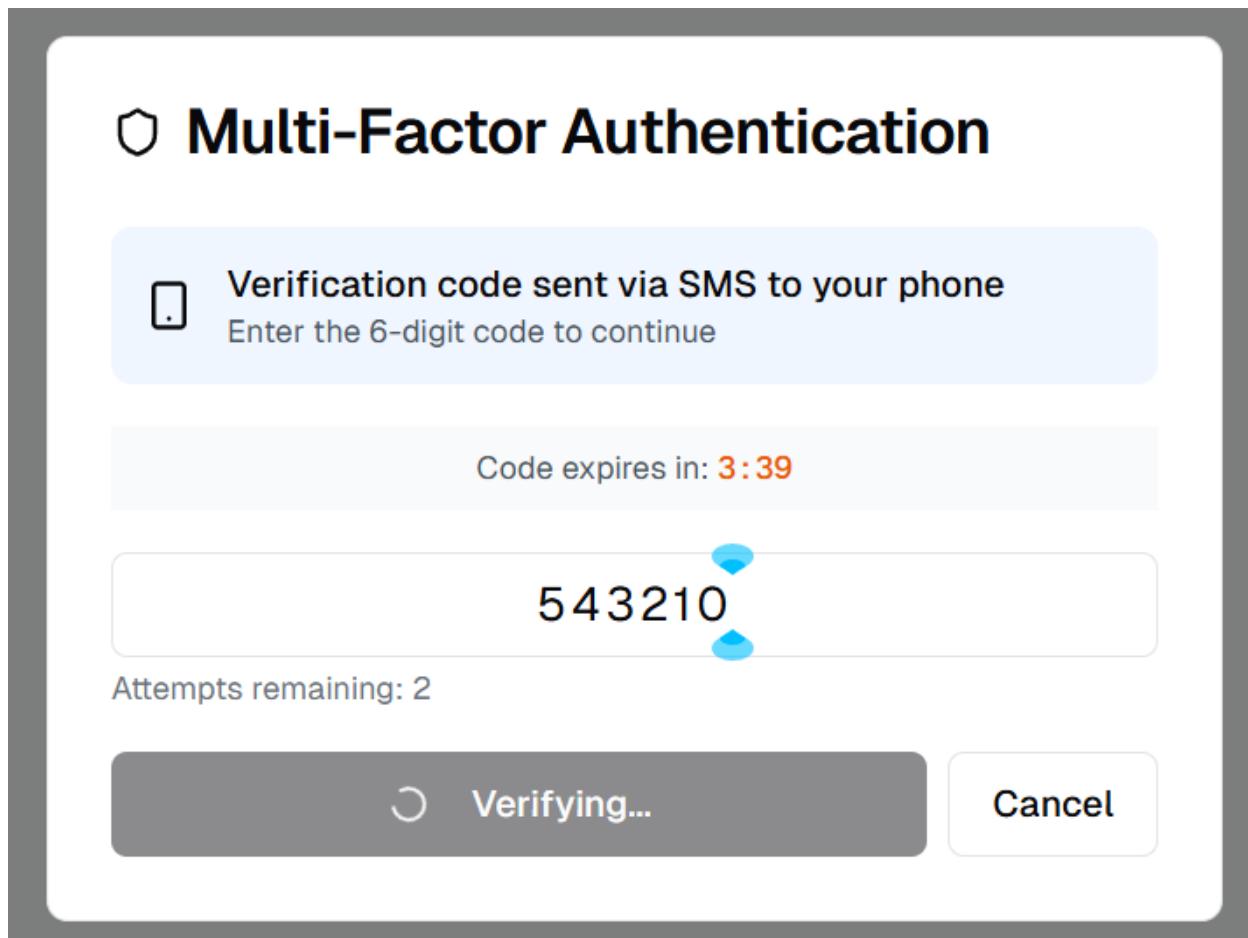


Digital Newspaper Website	Version: 1.0
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In case the OTP code is incorrect, or time out, the system will message “Invalid verification code”. The cancel will go back to the main screen of the Profile Information.

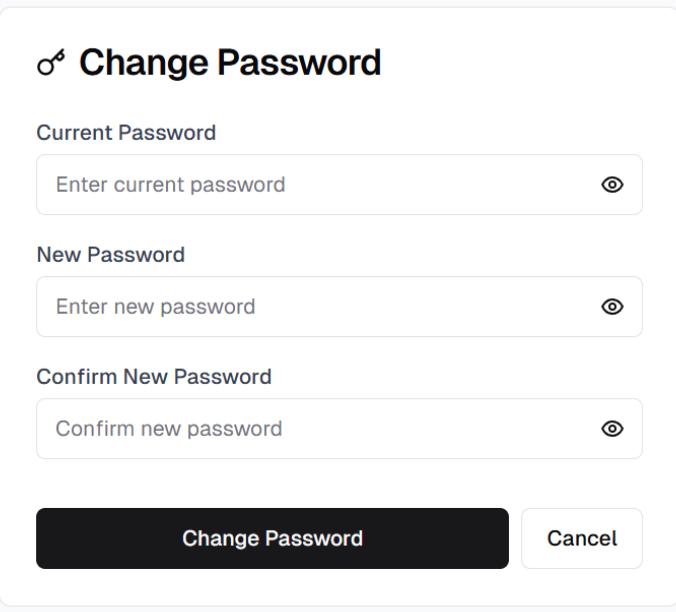
Digital Newspaper Website	Version: 1.0
Use-Case Specification: Change Password	Date: 31/7/2025
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The previous OTP code is incorrect, so that the Attempts remaining decrease from 3 to 2. After retyping the OTP code and clicking the Verify button. The verification is processing.

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← **Change Password**



The image shows a mobile-style interface for changing a password. At the top center is the title "Change Password" with a gear icon. Below it are three input fields: "Current Password", "New Password", and "Confirm New Password", each with a placeholder text and a visibility eye icon. At the bottom are two buttons: a large dark blue "Change Password" button on the left and a smaller white "Cancel" button on the right.

After the OTP code is successfully verified, the Change Password screen is displayed.

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♂ Change Password

Current Password

chaseyoudream



New Password

helloevery1



- At least 8 characters
- Contains at least one number
- Contains special character
- Contains uppercase letter
- Contains lowercase letter
- Different from current password

Confirm New Password

helloevery1



- Passwords match

Change Password

Cancel

The new password does not meet the format and security criteria for the password. Depends on which mistakes, the system shows to the user to adjust the right format password. In this case, if the user chooses the Cancel button, it will go to the Profile Information screen.

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♂ Change Password

Current Password

New Password

- At least 8 characters
- Contains at least one number
- Contains special character
- Contains uppercase letter
- Contains lowercase letter
- Different from current password

Confirm New Password

- Passwords match

Change Password

Cancel

The same as the picture above. One difference is that the user can click to the Eye Symbol to show or hide the password.

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♂ Change Password

Current Password

New Password

- At least 8 characters
- Contains at least one number
- Contains special character
- Contains uppercase letter
- Contains lowercase letter
- Different from current password

Confirm New Password

 Passwords match

 Incorrect password

Change Password

Cancel

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After the user clicks the Change Password button, the system will check the information. In this case, the password does not meet the format and security criteria for password requirements, so that the system messages “Incorrect password”

♂ Change Password

Current Password

✖

New Password

✖

At least 8 characters
 Contains at least one number
 Contains special character
 Contains uppercase letter
 Contains lowercase letter
 Different from current password

Confirm New Password

✖

Passwords match

Change Password
Cancel

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The systems show the mistakes directly when the user typing the wrong password.

♂ Change Password

Current Password

Minhth@070705



New Password

Minhth@070705



- At least 8 characters
- Contains at least one number
- Contains special character
- Contains uppercase letter
- Contains lowercase letter
- Different from current password

Confirm New Password

Minhth@070705



- Passwords match

! Incorrect password

Change Password

Cancel

The system still check the Confirm New Password with New Password regardless of it is the same or not the same with Old Password.

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♂ Change Password

Current Password

Enter current password 

New Password

 Please fill out this field.
 Minhth@070705 

 At least 8 characters
 Contains at least one number
 Contains special character
 Contains uppercase letter
 Contains lowercase letter

Confirm New Password

Minhth@070705 

 Passwords match

 Incorrect password

Digital Newspaper Website	Version: 1.0
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The system messages “Please fill out this field” at the box that the user leave it empty.

♂ Change Password

Current Password



New Password



At least 8 characters
 Contains at least one number
 Contains special character
 Contains uppercase letter
 Contains lowercase letter
 Different from current password

Confirm New Password



 Passwords match

Change Password Cancel

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♂ Change Password

Current Password

New Password

At least 8 characters
 Contains at least one number
 Contains special character
 Contains uppercase letter
 Contains lowercase letter
 Different from current password

Confirm New Password

Passwords match

Change Password

Cancel

No red color check, that means the password is correct with the format and security criteria for password

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requirements.

♂ Change Password

Current Password

Minhth@0707054123



New Password

Minhth@070705412



- At least 8 characters
- Contains at least one number
- Contains special character
- Contains uppercase letter
- Contains lowercase letter
- Different from current password

Confirm New Password

Minhth@070705412



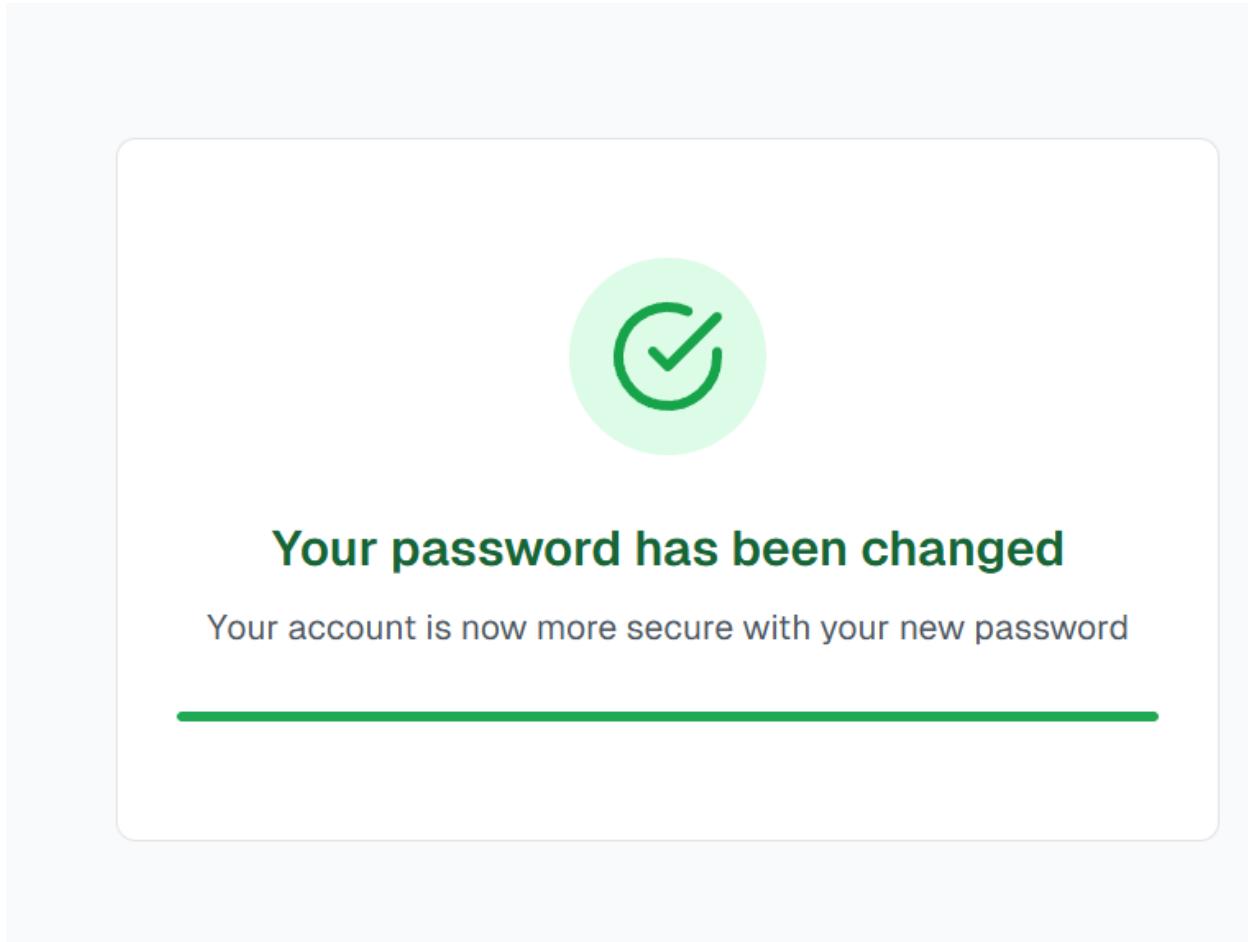
- Passwords match

Updating...

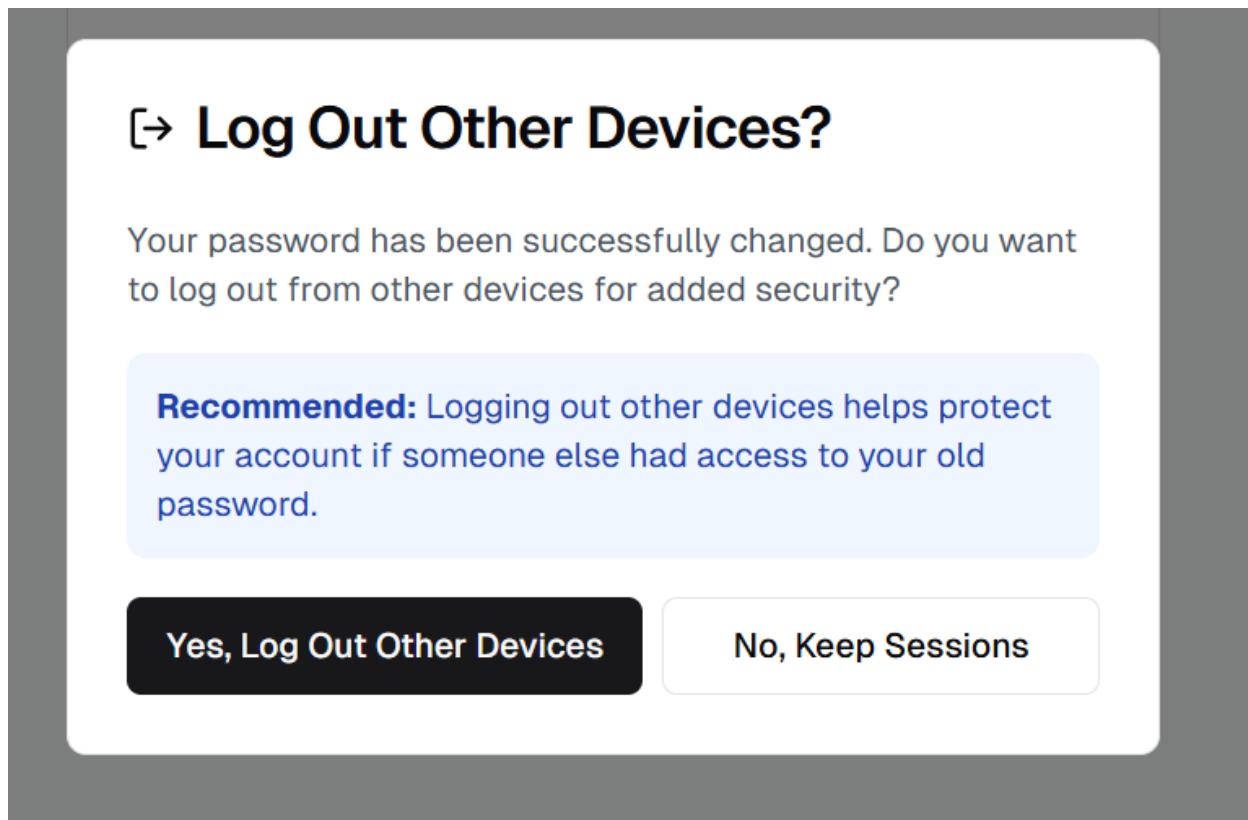
Cancel

Digital Newspaper Website	Version: 1.0
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After clicking the Change Password button, because the Old Password is corrected and the New Password and Confirm New Password meet and concurrency. So that the system Updating the New Password.



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After Change Password successfully, the system asks the user if they want to log out other devices or not

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← **Settings & Privacy**

 Sarah Johnson

 **Profile Information**



Sarah Johnson
sarah.johnson@email.com

[Edit Profile](#)

 **Security Settings**

Password

Change your account password

[Change Password](#)

Multi-Factor Authentication

Enabled - Add an extra layer of security

[Manage](#)

After choosing “Yes, Log Out Other Devices” or “No, Keep Sections”, the system back to the Profile Information screen

404 Not Found

**Digital Newspaper Website
Use-Case Specification: Recover Password**

Version 1.0

Digital Newspaper Website	Version: 1.0
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UC14	

Revision History

Date	Version	Description	Author
18/07/2025	1.0	Specific about the Recover Password use case	Thạch Ngọc Hân

Digital Newspaper Website	Version: 1.0
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Use-Case Specification: Recover Password

1. Use-Case Name: Recover Password

1.1 Brief Description

This use case describes how a user can recover access to their account in case they forget their password. It involves requesting a password reset link via email and setting a new password using a secure recovery token.

2. Flow of Events

2.1 Basic Flow

1. The use case starts when the user clicks on the “Forgot Password?” link on the login page.
2. The user is directed to the Password Recovery page.
3. The user enters their registered email address and submits the form.
4. The System validates the email format and checks if it exists in the database.
5. If the email is valid, the system generates a secure, time-limited password reset token
6. The system sends a recovery email with a reset link to the user’s email address.
7. The user clicks the link and is redirected to the Reset Password page.
8. The user enters a new password and confirms it.
9. The system validates the token and the new password, updates the password in the database, and notifies the user of success.
10. The use case ends.

2.2 Alternative Flows

2.2.1 Invalid Email Address

At step 4 of the Basic Flow, if the email address is not associated with any account:

- a. The system shows an error message: “This email is not registered.”
- b. The user may try a different email or return to the login page.

2.2.2 Expired or Invalid Token

At step 9 of the Basic Flow, if the token is expired or tampered with:

- a. The system displays a message: “This reset link is invalid or has expired.”
- b. The user is prompted to request a new password reset link.
- c. The flow returns to step 1 of the Basic Flow.

3. Special Requirements

3.1 Security & Privacy

1. The reset token must be encrypted, unique, and expire within 15 minutes.
2. The new password must meet system-defined complexity requirements.

4. Preconditions

- 4.1 The user is on the login page and selects the option to recover their password.
- 4.2 The system is online and email services are operational.

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5. Postconditions

- 5.1 The user's password has been securely changed.
- 5.2 The reset token is invalidated.
- 5.3 The user may now log in with the new password.

6. Extension Points

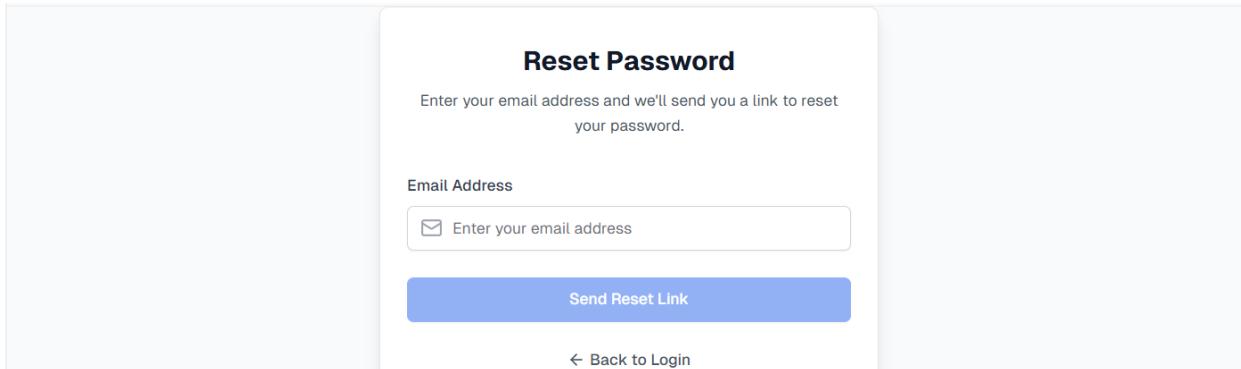
6.1 Redirect to Login

- Location: After step 9 of the Basic Flow.
- Description: The system redirects the user to the login page with a success message: "Your password has been updated. Please log in."

Original interface

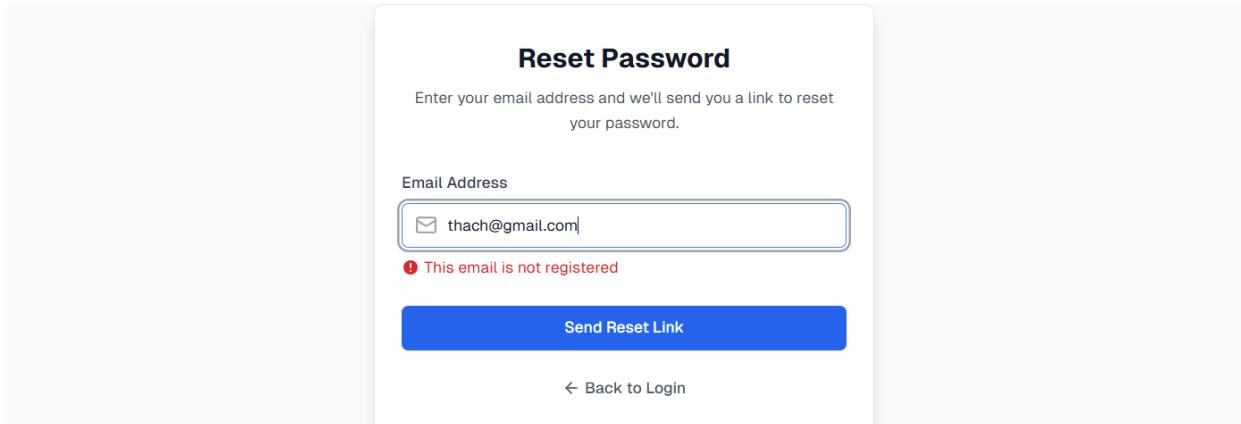
When you click "Forgot Password?"

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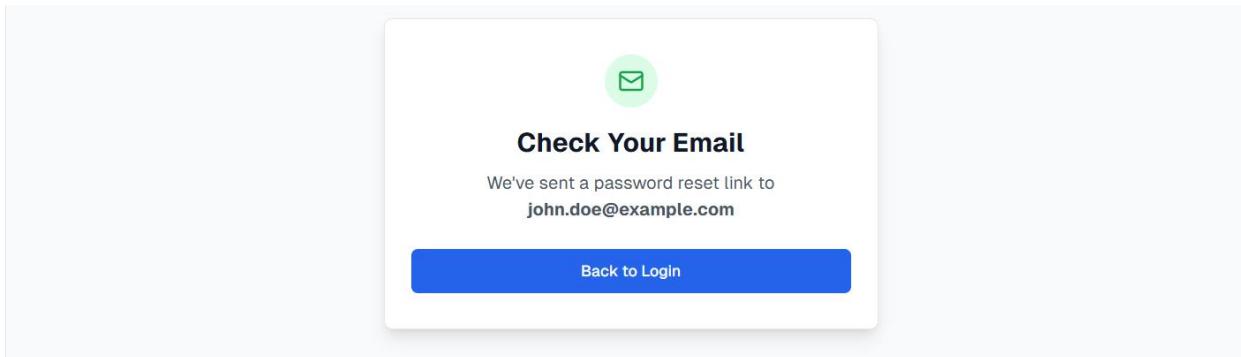
The screenshot shows a 'Reset Password' form. At the top, it says 'Reset Password' and asks for an email address to send a password reset link. Below the input field, there is a red error message: 'This email is not registered'. A blue 'Send Reset Link' button is at the bottom.

When you enter an invalid email



The screenshot shows the same 'Reset Password' form. This time, the email address 'thach@gmail.com' is entered into the input field. Below the input field, there is a red error message: 'This email is not registered'. A blue 'Send Reset Link' button is at the bottom.

When the email is valid



The screenshot shows a confirmation message titled 'Check Your Email'. It says: 'We've sent a password reset link to john.doe@example.com'. Below the message is a blue 'Back to Login' button.

404 Not Found

**Digital Newspaper Website
Use-Case Specification: View Recommended Articles**

Version 1.0

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Use-Case Specification: View Recommended Articles	Date: 31/7/2025
UC15	

Revision History

Date	Version	Description	Author
14/07/2025	1.0	Complete the document	Trần Hữu Khang

Digital Newspaper Website	Version: 1.0
Use-Case Specification: View Recommended Articles	Date: 31/7/2025
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Use-Case Specification: View Recommended Articles

1. Use-Case Name: View Recommended Articles

1.1 Brief Description

This use case describes the process by which a Reader views a list of recommended articles on the Digital Newspaper Website. The system uses the Reader's browsing history, preferences, or trending topics to generate and display a personalised or curated list of articles.

2. Flow of Events

2.1 Basic Flow

This use case starts when the Reader accesses the Digital Newspaper Website.

1. The Reader navigates to the homepage or a dedicated "Recommended Articles" section.
2. The system retrieves the Reader's profile data (if logged in) or session-based browsing history (if not logged in) to generate a list of recommended articles/
3. The system displays a list of recommended articles, including each article's title, a thumbnail image (if available), a brief excerpt (first 50 words of the article), and publication date.
4. The Reader scrolls through the list and selects an article by clicking on its title or thumbnail.
5. The system displays the full article content, including text, images, and any embedded media.
6. The Reader may choose to return to the recommended articles list or continue browsing other sections of the website.

2.2 Alternative Flows

2.2.1 No Recommendations Available

- If the system cannot generate recommendations (e.g., no browsing history for a new user or system error), it displays a default list of trending articles based on the most viewed or shared articles in the past 24 hours.
- The flow continues from Basic Flow step 3.

2.2.2 Reader Shares Article

- At Basic Flow step 5, the Reader selects a "Share" option (e.g., via social media, email, or link copy).
- The system provides sharing options (e.g., Twitter, Facebook, email) and, upon selection, facilitates the sharing process (e.g., opens a pre-filled tweet or copies the article URL to the clipboard).
- The flow continues from Basic Flow step 6.

3. Special Requirements

3.1 Recommendation Algorithm

The recommendation algorithm must prioritise articles based on relevance to the Reader's preferences or browsing history, with a fallback to trending articles.

3.2 Performance

The system must load the recommended articles list within 2 seconds under normal server load.

3.3 Accessibility

The system must support accessibility standards (e.g., WCAG 2.1) for the article list and content display, including screen reader compatibility.

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3.4 Browser Compatibility

The system must ensure compatibility with common browsers (e.g., Chrome, Firefox, Safari) and mobile devices.

3.5 Data Privacy

The system must comply with GDPR for handling Reader data used in generating recommendations.

4. Preconditions

4.1 System Accessibility

The Digital Newspaper Website must be accessible and operational.

4.2 Article Database

The system must have access to a database of published articles.

4.3 Reader Profile

If personalised recommendations are used, the Reader must have a profile with stored preferences or a browsing history.

5. Postconditions

5.1 Article List Display

The Reader views a list of recommended or trending articles.

5.2 Article Content Access

The Reader may view the full content of a selected article.

5.3 Browsing History Update

The system updates the Reader's browsing history with the viewed article (if tracking is enabled).

6. Extension Points

6.1 Customize Recommendations

- Location: Basic Flow, step 2.
- The Reader can update their preferences (e.g., preferred categories or topics) via a settings page, which the system uses to refine the recommendation algorithm.

7. Low Fidelity Prototype For Use Case

7.1 Prompt Used for AI Tool

- Design a responsive web interface for a Digital Newspaper Website that implements the "View Recommended Articles" use case.
- Functional Requirements: [2. Flow of Event 6.Extension Points] (*Paste the use case specification from section 2 to 6 here*)
- Optional: Sidebar or settings page for updating user preferences. / Visual indicator for whether recommendations are based on history or trending.

7.2 Generated Interface

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The home page:

The screenshot shows the Digital News homepage. At the top, there is a navigation bar with "Digital News" and links for Home, Politics, Technology, Sports, and Business. To the right of the navigation bar is a search bar with the placeholder "Search articles..." and icons for user profile and settings. Below the navigation bar, a section titled "Recommended for You" is displayed, with a "Personalized" button. A sub-header states "Articles curated based on your reading preferences and interests." Three article cards are shown in a grid:

- Technology**: Revolutionary AI Technology Transforms Healthcare Industry. By Dr. Sarah Johnson, 1/15/2024. Read time: 5 min.
- Technology**: Breakthrough in Quantum Computing Achieves New Milestone. By Dr. Emily Rodriguez, 1/14/2024. Read time: 6 min.
- Environment**: Renewable Energy Adoption Reaches Record High Globally. By Lisa Thompson, 1/13/2024. Read time: 5 min.

Customisation Menu:

Customize Your Recommendations

Select your preferred categories and topics to get personalized article recommendations.

Categories

5 selected

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> Technology | <input type="checkbox"/> Politics | <input type="checkbox"/> Business |
| <input type="checkbox"/> Science | <input checked="" type="checkbox"/> Sports | <input checked="" type="checkbox"/> Entertainment |
| <input type="checkbox"/> Health | <input checked="" type="checkbox"/> Environment | <input checked="" type="checkbox"/> Education |
| <input type="checkbox"/> Travel | | |

Topics of Interest

2 selected

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> AI | <input checked="" type="checkbox"/> Climate Change | <input type="checkbox"/> Cryptocurrency |
| <input type="checkbox"/> Space Exploration | <input type="checkbox"/> Cybersecurity | <input type="checkbox"/> Renewable Energy |
| <input type="checkbox"/> Healthcare Innovation | <input type="checkbox"/> Economic Policy | <input type="checkbox"/> Social Media |
| <input type="checkbox"/> Startups | | |

Your Current Selections

Categories:

- Technology**
- Environment**
- Sports**
- Entertainment**
- Education**

Page 6

Confidential

Topics:

- AI**
- Climate Change**

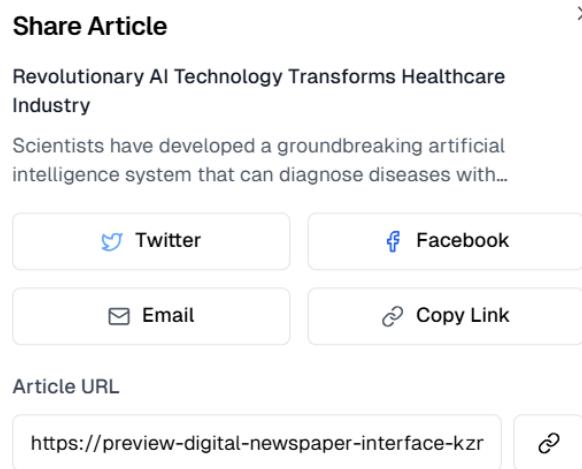
Reset All

Cancel

Save Preferences

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Sharing post:



404 Not Found

**Digital Newspaper Website
Use-Case Specification: Generate Reports**

Version 1.0

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Revision History

Date	Version	Description	Author
14/07/2025	1.0	Complete the document	Trần Hữu Khang

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Use-Case Specification: Generate Reports

1. Use-Case Name: Generate Reports

1.1 Brief Description

This use case describes the process by which an Admin generates reports on the Digital Newspaper Website's performance, user activity, or content metrics using the content management system (CMS). The Admin selects report parameters, generates the report, and exports or views the results.

2. Flow of Events

2.1 Basic Flow

This use case starts when the Admin logs into the Digital Newspaper Website's CMS and accesses the reporting dashboard.

1. The Admin navigates to the "Reports" section in the CMS.
2. The system displays a list of available report types.
3. The Admin selects a report type and specifies parameters.
4. The system validates the input parameters.
5. The Admin selects the output format.
6. The system generates the report based on the selected type and parameters, retrieving relevant data from the CMS database.
7. The system displays the report on-screen or provides a download link for the selected format.
8. The Admin reviews the report and may choose to save, print, or share it via email.
9. The system confirms the successful generation and delivery of the report to the Admin.

2.2 Alternative Flows

2.2.1 Custom Report Filters

- At Basic Flow step 3, the Admin applies advanced filters (e.g., specific Writers, article categories, or geographic regions for traffic).
- The system updates the report generation options to reflect the custom filters and proceeds with validation (returns to Basic Flow step 4).

2.2.2 Export Failure

- At Basic Flow step 7, if the report export fails (e.g., due to file format issues or server timeout), the system displays an error message (e.g., "Export failed. Please try again or select a different format").
- The Admin can retry the export or choose a different format (returns to Basic Flow step 5).

3. Special Requirements

3.1 Supported Metrics

The CMS must support report generation for at least the following metrics: article views, user registrations, comment activity, and website traffic.

3.2 Performance

The system must generate and display or export reports within 10 seconds under normal server load for datasets up to 10,000 records.

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3.3 Export Formats

The system must support report exports in PDF and CSV formats, with PDF reports adhering to a professional layout.

3.4 Browser Compatibility

The system must ensure compatibility with common browsers (e.g., Chrome, Firefox, Safari) for the reporting interface.

3.5 Data Privacy

The system must comply with GDPR for handling personal data included in reports.

4. Preconditions

4.1 Admin Authentication

The Admin must be registered and logged into the CMS with valid credentials.

4.2 Admin Permissions

The Admin must have the role of "Admin" with permissions to generate reports.

4.3 System Accessibility

The CMS must be accessible and operational.

4.4 Data Availability

The CMS database must contain relevant data (e.g., articles, user activity, or traffic metrics) for report generation.

5. Postconditions

5.1 Report Generation

The report is generated and either displayed on-screen or exported as a PDF or CSV file.

5.2 Confirmation

The Admin receives confirmation of the report generation or export.

5.3 Report Delivery

If exported, the report is saved or sent to the Admin's specified destination (e.g., downloaded file or email).

6. Extension Points

6.1 Schedule Report Generation

- Location: Basic Flow, step 3.
- The Admin can schedule recurring reports (e.g., weekly or monthly) by specifying a schedule and delivery method (e.g., email). The system generates and sends the report automatically at the specified intervals.

7. Low Fidelity Prototype For Use Case

7.1 Prompt Used for AI Tool

- Design an Admin Dashboard interface for a Digital Newspaper Website CMS that supports the "Generate Reports" use case.
- Functional Requirements: [2. Flow of Event 6.Extension Points] (*Paste the use case specification from section 2 to 6 here*)
- Assume the admin is already authenticated and viewing the CMS dashboard.

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7.2 Generated Interface

The overall dashboard from the Admin perspective:

Total Articles	Active Users	Page Views	Comments
1,234	5,678	89,012	3,456

Custom Report Generator:

Report Generator

Select report type, configure parameters, and generate custom reports

Report Type

Article Views
Track article performance and readership

Parameters

Date Range

Last 7 days

Categories

Technology

Author

Sarah Johnson

Advanced Filters

Regions

<input type="checkbox"/> North America	<input type="checkbox"/> Europe
<input checked="" type="checkbox"/> Asia	<input type="checkbox"/> South America
<input type="checkbox"/> Africa	<input type="checkbox"/> Oceania

Output Format

PDF Report CSV Data

Selected Parameters

dateRange: last-7-days category: Technology author: Sarah Johnson regions: Asia

Schedule report for automation:

Generate Report

Report Preview

Preview and export your generated report

Article Views

Generated on 7/19/2025, 1:48:39 PM

PDF

Report Parameters

Date Range: last-7-days

Format: pdf

Category: Technology

Author: Sarah Johnson

Regions: Asia

Summary

273,726

Total Views

5,475

Avg Views

Data Preview

50 total records

ID	Date	Title	Views	Category	Author
1	2025-07-19	Article 1	7788	Sports	John Smith
2	2025-06-26	Article 2	401	Entertainment	Michael Chen
3	2025-07-09	Article 3	2492	Sports	Emily Rodriguez
4	2025-06-26	Article 4	4981	Sports	Emily Rodriguez
5	2025-06-24	Article 5	6026	Health	Emily Rodriguez
6	2025-07-16	Article 6	7338	Politics	John Smith
7	2025-07-05	Article 7	4442	Sports	Robert Kim

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✖

Schedule New Report

Basic Information

Report Name *
e.g., Weekly Performance Summary

Report Type * **Frequency ***
Select report type Select frequency

Delivery Time
09:00 AM

Recipients + Add
recipient@example.com

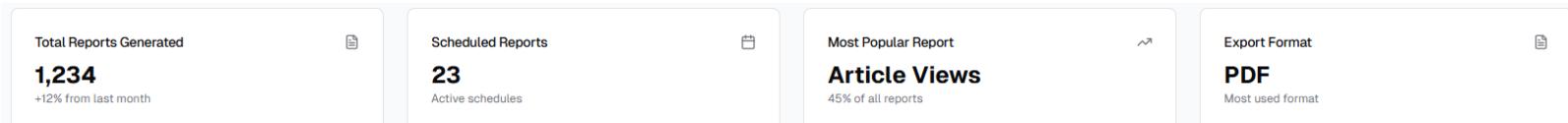
Format & Options

Output Format
PDF Report

Include charts and visualizations
 Automatically archive reports after 90 days

Cancel Schedule Report

Analytics on reports:



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**Digital Newspaper Website
Use-Case Specification: Moderate Comments**

Version 1.0

Digital Newspaper Website	Version: 1.0
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Revision History

Date	Version	Description	Author
14/07/2025	1.0	Complete the document	Trần Hữu Khang

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Use-Case Specification: Moderate Comments

1. Use-Case Name: Moderate Comments

1.1 Brief Description

This use case describes the process by which an Editor moderates user comments on articles published on the Digital Newspaper Website. The Editor reviews, approves, rejects, or deletes comments using the content management system (CMS) to ensure they comply with community guidelines.

2. Flow of Events

2.1 Basic Flow

This use case starts when the Editor logs into the Digital Newspaper Website's CMS and accesses the comment moderation dashboard.

1. The Editor navigates to the "Comment Moderation" section in the CMS.
2. The system displays a list of comments, including their status (e.g., Pending, Approved, Rejected), the associated article title, the commenter's username or email, the comment text, and the submission date.
3. The Editor selects a comment marked "Pending" to review its content.
4. The system displays the full comment text, the associated article, and available actions (e.g., Approve, Reject, Delete, Edit).
5. The Editor reviews the comment for compliance with community guidelines and chooses one of the following actions:
 - a. **Approve:** The Editor marks the comment as approved for public display.
 - b. **Reject:** The Editor rejects the comment and provides optional feedback.
 - c. **Delete:** The Editor deletes the comment without notifying the commenter.
 - d. **Edit:** The Editor modifies the comment (e.g., removes offensive words) and approves or resubmits it for review.
6. If the Editor selects "Edit," the system saves the modified comment and updates its status based on the Editor's choice (e.g., Approved or Pending).
7. If the Editor selects "Approve," the system marks the comment as "Approved," and it becomes visible on the article's public comment section.
8. If the Editor selects "Reject," the system notifies the commenter via email or CMS notification with the provided feedback (if any).
9. If the Editor selects "Delete," the system removes the comment from the CMS without notification.
10. The system confirms the action to the Editor.

2.2 Alternative Flows

2.2.1 Bulk Moderation

- At Basic Flow step 2, the Editor selects multiple comments and applies a bulk action (e.g., approve, reject, or delete).
- The system prompts the Editor to confirm the bulk action.
- Upon confirmation, the system applies the action to all selected comments and notifies commenters (if applicable, e.g., for rejections).
- The flow continues from Basic Flow step 10.

2.2.2 Flagged Comment Review

- At Basic Flow step 2, the system highlights comments flagged by users or automated filters. The Editor prioritises reviewing flagged comments and proceeds with the actions in Basic Flow step 5.

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- The flow continues from Basic Flow step 6.

3. Special Requirements

3.1 Comment Filtering

The CMS must support filtering comments by status (Pending, Approved, Rejected) and by article or submission date.

3.2 Performance

The system must load the comment moderation dashboard within 3 seconds under normal server load.

3.3 Bulk Moderation

The system must support bulk moderation for up to 100 comments at once without performance degradation.

3.4 Browser Compatibility

The system must ensure compatibility with common browsers (e.g., Chrome, Firefox, Safari) for the CMS interface.

3.5 Data Privacy

The system must comply with GDPR for handling personal data in comments and notifications.

4. Preconditions

4.1 Editor Authentication

The Editor must be registered and logged into the CMS with valid credentials.

4.2 Editor Permissions

The Editor must have the role of "Editor" with permissions to moderate comments.

4.3 System Accessibility

The CMS must be accessible and operational.

4.4 Comment Availability

At least one comment must be available in the CMS for moderation.

5. Postconditions

5.1 Comment Status Update

The comment's status is updated to Approved, Rejected, or Deleted in the CMS.

5.2 Commenter Notification

The commenter is notified if the comment is rejected with feedback provided.

5.3 Comment Visibility

Approved comments are visible in the article's public comment section.

5.4 Action Confirmation

The Editor receives confirmation of the moderation action taken.

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6. Extension Points

6.1 Ban Commenter

- Location: Basic Flow, step 5.
- The Editor can ban the commenter from posting further comments by selecting a “Ban User” option. The system updates the commenter’s account status to “Banned” and prevents future comment submissions.

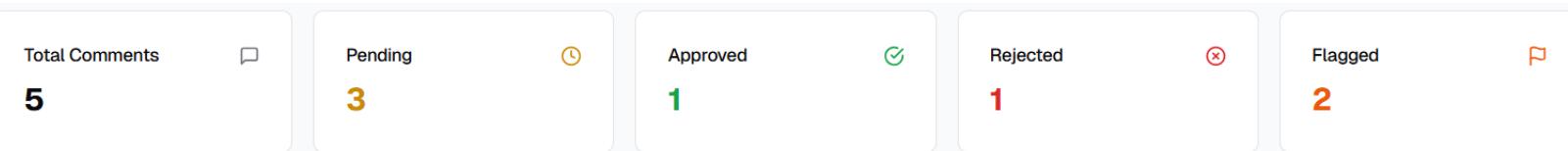
7. Low Fidelity Prototype For Use Case

7.1 Prompt Used for AI Tool

- Design a CMS interface for a Digital Newspaper Website that supports the "Moderate Comments" use case. The interface is used by Editors to manage user comments submitted on articles.
- Functional Requirements: [2. Flow of Event 6.Extension Points] (*Paste the use case specification from section 2 to 6 here*)
- Optional: A search bar and filter controls (status, date, article). / Pagination for long comment lists.

7.2 Generated Interface

Overall Data:



Filtering Comments:

Search Comments

Status Date Range

Advanced Filters

Article

Comments (3)

Review and moderate user comments. Click on a comment to view details and take action.

Page 1 of 1

<input type="checkbox"/> Comment	Author	Article	Status	Date	Actions
<input type="checkbox"/> This is a great article! I really enjoyed reading about the new technology developments.	John Smith john.smith@example.com	Revolutionary AI Technology Transforms... View Article	Pending	1/15/2024	<input type="button" value="Review"/>
<input type="checkbox"/> I disagree with this perspective. The author seems biased and doesn't present all the facts.	Sarah Johnson sarah.j@example.com	Climate Summit Reaches Historic Agreement o... View Article	Pending	1/15/2024	<input type="button" value="Review"/>
<input type="checkbox"/> This is spam content with inappropriate language and offensive remarks that violate community guidelines.	Anonymous User spam@example.com	Revolutionary AI Technology Transforms... View Article	Pending	1/15/2024	<input type="button" value="Review"/>

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Apply action simultaneously:

2 comments selected Approve Apply Action Clear Selection

Comments (3)

Review and moderate user comments. Click on a comment to view details and take action.

<input type="checkbox"/>	Comment	Author	Article	Status	Date	Actions
<input checked="" type="checkbox"/>	This is a great article! I really enjoyed reading about the new technology...	 John Smith john.smith@example.com	Revolutionary AI Technology... View Article	Pending	1/15/2024	<button>Review</button>
<input checked="" type="checkbox"/>	I disagree with this perspective. The author seems biased and doesn't...	 Sarah Johnson sarah.j@example.com	Climate Summit Reaches Histori... View Article	Pending	1/15/2024	<button>Review</button>
<input type="checkbox"/>	This is spam content with inappropriate language and offensive remarks that...	 Anonymous User spam@example.com	Revolutionary AI Technology... View Article	Pending	1/15/2024	<button>Review</button>

Focus on all flagged comments:

All Comments Flagged Comments (2)

⚠ Flagged Comments Require Attention

2 comments have been flagged by users or automatic filters. Please review and take appropriate action.

Priority Review Queue

5 flags High Priority Pending Review 1/15/2024

This is spam content with inappropriate language and offensive remarks that violate community guidelines.

Spam Inappropriate content Offensive language

 Anonymous User
spam@example.com Revolutionary AI Technology Transforms Healthcare Industry [View Article](#)

Approve Reject Review Details

2 flags Low Priority Pending Review 1/15/2024

I disagree with this perspective. The author seems biased and doesn't present all the facts.

Inappropriate content Spam

 Sarah Johnson
sarah.j@example.com Climate Summit Reaches Historic Agreement on Carbon Emissions [View Article](#)

Approve Reject Review Details

404 Not Found

**Digital Newspaper Website
Use-Case Specification: Manage User Roles**

Version 1.0

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Manage User Roles	Date: 31/7/2025
UC18	

Revision History

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Digital Newspaper Website	Version: 1.0
Use-Case Specification: Manage User Roles	Date: 31/7/2025
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Use-Case Specification: Manage User Roles

1. Use-Case Name: Manage User Roles

1.1 Brief Description

This use case describes the process by which an Admin manages user roles (e.g., Reader, Writer, Editor) on the Digital Newspaper Website. The Admin uses the content management system (CMS) to assign, modify, or revoke user roles to control access and permissions.

2. Flow of Events

2.1 Basic Flow

This use case starts when the Admin logs into the Digital Newspaper Website's CMS and accesses the user management dashboard.

1. The Admin navigates to the "User Management" section in the CMS.
2. The system displays a list of registered users, including their names, email addresses, current roles (e.g., Reader, Writer, Editor, Admin), and account status (e.g., Active, Inactive).
3. The Admin selects a user from the list to manage their role.
4. The system displays the user's profile, including their current role and available actions (e.g., Assign Role, Modify Role, Revoke Role).
5. The Admin selects an action:
 - a. **Assign Role:** The Admin assigns a new role (e.g., Writer, Editor) to a user with no role or an additional role.
 - b. **Modify Role:** The Admin changes the user's existing role (e.g., from Writer to Editor).
 - c. **Revoke Role:** The Admin removes a specific role from the user, reverting them to a default role (e.g., Reader).
6. The system validates the action (e.g., ensures at least one Admin remains, checks for role conflicts).
7. The Admin confirms the action.
8. The system updates the user's role in the CMS and sends a notification to the user via email or CMS notification, informing them of the role change.
9. The system confirms to the Admin that the user's role has been successfully updated.

2.2 Alternative Flows

2.2.1 No Users Available

- If no users are registered in the CMS, the system displays a message.
- The Admin may choose to invite a new user by entering their email address, triggering an invitation process.
- The use case ends.

2.2.2 Invalid Role Assignment

- At Basic Flow step 6, if the Admin attempts an invalid action (e.g., revoking the last Admin role or assigning conflicting roles), the system displays an error message (e.g., "At least one Admin role must remain" or "User cannot have both Writer and Editor roles").
- The Admin corrects the action and resubmits (returns to Basic Flow step 5).

3. Special Requirements

3.1 Admin Role Protection

The CMS must ensure that at least one user retains the Admin role at all times.

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3.2 Performance

The system must load the user management dashboard within 3 seconds under normal server load.

3.3 Bulk Role Management

The system must support bulk role management for up to 100 users without performance degradation.

3.4 Browser Compatibility

The system must ensure compatibility with common browsers (e.g., Chrome, Firefox, Safari) for the CMS interface.

3.5 Data Privacy

The system must comply with GDPR for handling personal user data during role management and notifications.

4. Preconditions

4.1 Admin Authentication

The Admin must be registered and logged into the CMS with valid credentials.

4.2 Admin Permissions

The Admin must have the role of "Admin" with permissions to manage user roles.

4.3 System Accessibility

The CMS must be accessible and operational.

4.4 User Availability

At least one user must be registered in the CMS.

5. Postconditions

5.1 Role Update

The selected user's role is updated (assigned, modified, or revoked) in the CMS.

5.2 User Notification

The user is notified of the role change via email or CMS notification.

5.3 Admin Role Assurance

The system ensures that at least one Admin role remains active.

5.4 Action Confirmation

The Admin receives confirmation of the role management action.

6. Extension Points

6.1 Invite New User

- Location: Basic Flow, step 2.
- The Admin can invite a new user by entering their email address and assigning an initial role. The system sends an invitation link to the user, allowing them to register and activate their account with the assigned role.

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7. Low Fidelity Prototype For Use Case

7.1 Prompt Used for AI Tool

- Design an Admin Interface for a CMS of a Digital Newspaper Website, supporting the "Manage User Roles" use case.
- Functional Requirements: [2. Flow of Event 6.Extension Points] (*Paste the use case specification from section 2 to 6 here*)
- Optional: Search bar and filters (by role/status). / Sorting by name, role, or status. / Tags for user roles with color coding.

7.2 Generated Interface

Overall Data:

User Management

Manage user roles and permissions for the Digital Newspaper CMS

Invite User



Filter User:

Search & Filters

Clear All

Search Users

Search by name or email...

Filter by Role

Filter by Status

Sort By

Editor

Active

Name ↴

Role

Status

Last Login

Users (2)

Manage user roles and permissions. Click on a user to modify their roles or use bulk actions for multiple users.

0 selected

<input type="checkbox"/>	User	Roles	Status	Last Login	Actions
<input type="checkbox"/>	Sarah Johnson sarah.johnson@digitalnews.com	Editor	active	1/15/2024	...
<input type="checkbox"/>	John Smith john.smith@digitalnews.com	Admin Editor	active	1/15/2024	...

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Apply action simultaneously:

2 users selected

Assign Role

Editor

Apply Action

Clear Selection

Users (6)

Manage user roles and permissions. Click on a user to modify their roles or use bulk actions for multiple users.

<input type="checkbox"/>	User	Roles	Status	Last Login	Actions
<input checked="" type="checkbox"/>	Emily Rodriguez emily.rodriguez@digitalnews.com	Writer	inactive	1/10/2024	
<input type="checkbox"/>	John Smith john.smith@digitalnews.com	Admin Editor	active	1/15/2024	
<input type="checkbox"/>	Lisa Thompson lisa.thompson@digitalnews.com	Admin	active	1/15/2024	
<input checked="" type="checkbox"/>	Mike Chen mike.chen@digitalnews.com	Writer	active	1/15/2024	
<input type="checkbox"/>	Robert Kim robert.kim@digitalnews.com	Reader	active	1/15/2024	
<input type="checkbox"/>	Sarah Johnson sarah.johnson@digitalnews.com	Editor	active	1/15/2024	

404 Not Found

**Digital Newspaper Website
Use-Case Specification: Manage Articles**

Version 1.0

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Manage Articles	Date: 31/7/2025
UC19	

Revision History

Date	Version	Description	Author
18/07/2025	1.0	Complete the document	Trần Hữu Khang

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Use-Case Specification: Manage Articles

1. Use-Case Name: Manage Articles

1.1 Brief Description

This use case describes the process by which an Editor manages articles submitted by Writers on the Digital Newspaper Website. The Editor reviews, edits, approves, rejects, or schedules articles for publication using the content management system (CMS).

2. Flow of Events

2.1 Basic Flow

This use case starts when the Editor logs into the Digital Newspaper Website's CMS and accesses the article management dashboard.

1. The Editor navigates to the "Article Management" section in the CMS.
2. The system displays a list of articles with their status, including each article's title, Writer's name, submission date, and category.
3. The Editor selects an article marked "Pending Review" to review its content.
4. The system displays the article's full content, including title, body, category, tags, and any attached media (e.g., images, videos).
5. The Editor reviews the article and chooses one of the following actions.
 - a. **Edit:** The Editor modifies the article's title, body, tags, or media, then saves changes.
 - b. **Approve:** The Editor marks the article as approved for publication.
 - c. **Reject:** The Editor rejects the article and provides feedback.
 - d. **Schedule:** The Editor sets a publication date and time for an approved article.
6. If the Editor selects "Edit," the system saves the changes and updates the article status to "Draft" or "Pending Review" (based on the Editor's choice).
7. If the Editor selects "Approve," the system marks the article as "Approved" and makes it available for publication or scheduling.
8. If the Editor selects "Reject," the system notifies the Writer via email or CMS notification with the provided feedback.
9. If the Editor selects "Schedule," the system saves the publication date and time, and the article is queued for automatic publishing.
10. The system confirms the action to the Editor.

2.2 Alternative Flows

2.2.1 No Articles Pending Review

- No Articles Pending Review
- If no articles are marked "Pending Review," the system displays a message (e.g., "No articles awaiting review") and shows a list of articles in other statuses (e.g., Draft, Approved, Rejected).
- The Editor may select an article in another status to review or edit (returns to Basic Flow step 4).

2.2.2 Bulk Actions

- At Basic Flow step 2, the Editor selects multiple articles and applies a bulk action (e.g., approve, reject, or delete).
- The system prompts the Editor to confirm the action.
- Upon confirmation, the system applies the action to all selected articles and notifies the respective Writers (if applicable).

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- The flow continues from Basic Flow step 10.

3. Special Requirements

3.1 Rich Text Editing

The CMS must support rich text editing for article content (e.g., bold, italics, hyperlinks, bullet lists).

3.2 Performance

The system must load the article management dashboard within 3 seconds under normal server load.

3.3 Bulk Actions

The system must support bulk actions for at least 50 articles at once without performance degradation.

3.4 Browser Compatibility

The system must ensure compatibility with common browsers (e.g., Chrome, Firefox, Safari) for the CMS interface.

3.5 Data Privacy

The system must comply with GDPR for handling any personal data included in articles or Writer notifications.

4. Preconditions

4.1 Editor Authentication

The Editor must be registered and logged into the CMS with valid credentials.

4.2 Editor Permissions

The Editor must have the role of "Editor" with permissions to manage articles.

4.3 System Accessibility

The CMS must be accessible and operational.

4.4 Article Availability

At least one article must be available in the CMS for management.

5. Postconditions

5.1 Article Status Update

The article's status is updated to Draft, Approved, Rejected, or Scheduled in the CMS.

5.2 Writer Notification

The Writer is notified if the article is rejected or requires further edits.

5.3 Publication Queue

If scheduled, the article is queued for publication at the specified date and time.

5.4 Action Confirmation

The Editor receives confirmation of the action taken.

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6. Extension Points

6.1 Assign Reviewer

- Location: Basic Flow, step 3.
- The Editor can assign another Editor or Reviewer to review the article by selecting their name or email from a list of registered CMS users. The system notifies the assigned Reviewer and grants them access to the article.

7. Low Fidelity Prototype For Use Case

7.1 Prompt Used for AI Tool

- Design a CMS interface for Editors on a Digital Newspaper Website that supports the "Manage Articles" use case.
- Functional Requirements: [2. Flow of Event 6.Extension Points] (*Paste the use case specification from section 2 to 6 here*)
- Optional: Search bar or filters by status or category. /Tags for article status (color-coded). / Responsive layout for tablet and desktop.

7.2 Generated Interface

Overall Data:

Article Management

Review, edit, and manage articles submitted by writers

Total Articles



5

Pending Review



1

Approved



1

Scheduled



1

Rejected



1

Drafts



1

Filter User:

Search Articles

Search by title or writer...

Filter by Status

Filter by Category

Filter by Writer

Sort By

All Statuses



Technology



All Writers



Date ↴

Title

Writer

Status

Articles (2)

Review and manage articles submitted by writers. Click on an article to view details and take action.

0 selected

<input type="checkbox"/>	Article	Writer	Category	Status	Submitted	Actions
<input type="checkbox"/>	Revolutionary AI Technology Transforms Healthcare...					
<input type="checkbox"/>	Scientists have developed a groundbreaking artificial intelligence system that can diagnose diseases with...	Dr. Sarah Johnson sarah.johnson@digitalnews.com	Technology	Pending Review	1/15/2024	...

1250 words AI Healthcare +2 more

<input type="checkbox"/>	Breakthrough in Quantum Computing Achieves New...	Dr. Emily Rodriguez emily.rodriguez@digitalnews.com	Technology	Draft	1/13/2024	...
--------------------------	---	--	------------	-------	-----------	-----

650 words Quantum Computing Technology +1 more

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Apply actions simultaneously:

2 articles selected Approve Apply Action X Clear Selection

Articles (5) 2 selected

Review and manage articles submitted by writers. Click on an article to view details and take action.

<input type="checkbox"/> Article	Writer	Category	Status	Submitted	Actions
<input type="checkbox"/> Revolutionary AI Technology Transforms Healthcare Industry Scientists have developed a groundbreaking artificial intelligence system that can diagnose diseases with unprecedented accuracy. 1250 words AI Healthcare +2 more	Dr. Sarah Johnson sarah.johnson@digitalnews.com	Technology	Pending Review	1/15/2024	...
<input checked="" type="checkbox"/> Climate Summit Reaches Historic Agreement on Carbon Emissions World leaders have reached a landmark agreement at the Global Climate Summit, committing to reduce carbon emissions by 50% within the next decade. 890 words Climate Change Environment +2 more	Michael Chen michael.chen@digitalnews.com	Politics	Approved	1/14/2024	...
<input checked="" type="checkbox"/> Breakthrough in Quantum Computing Achieves New Milestone Researchers at leading tech companies have achieved a significant breakthrough in quantum computing. 650 words Quantum Computing Technology +1 more	Dr. Emily Rodriguez emily.rodriguez@digitalnews.com	Technology	Draft	1/13/2024	...
<input type="checkbox"/> Global Economic Markets Show Strong Recovery Signs International markets are displaying robust recovery indicators following recent policy changes. 420 words Economics Markets +1 more	Robert Kim robert.kim@digitalnews.com	Business	Rejected	1/12/2024	...
<input type="checkbox"/> Space Exploration Mission Discovers Potential Signs of Life NASA's latest Mars rover mission has uncovered compelling evidence that could indicate past microbial life on the Red Planet.	Dr. Amanda Foster amanda.foster@digitalnews.com	Science	Scheduled	1/11/2024 Scheduled: 1/20/2024	...

404 Not Found

**Digital Newspaper Website
Use-Case Specification: Create Article**

Version 1.0

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Create Article	Date: 31/7/2025
UC20	

Revision History

Date	Version	Description	Author
18/07/2025	1.0	Complete the document	Trần Hữu Khang

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Use-Case Specification: Create Article

1. Use-Case Name: Create Article

1.1 Brief Description

This use case describes the process by which a Writer creates and submits an article for publication on the Digital Newspaper Website. The Writer uses the content management system (CMS) to input article details, including title, content, and media, and submits the article for editorial review.

2. Flow of Events

2.1 Basic Flow

This use case starts when the actor does something. An actor always initiates use cases. The use case starts when the Writer logs into the Digital Newspaper Website's CMS and selects the option to create a new article.

1. The Writer navigates to the "Create Article" section in the CMS dashboard.
2. The system displays a form with fields for the article's title, body content, category, tags, and optional media uploads (e.g., images or videos).
3. The Writer enters the article title, body content, selects a category (e.g., News, Opinion, Sports), and adds relevant tags (e.g., politics, technology).
4. The Writer optionally uploads media files to accompany the article.
5. The system validates the input to ensure required fields (title, body content, category) are filled and meet formatting requirements.
6. The Writer selects the "Preview" option to review the article's appearance.
7. The system renders a preview of the article, showing the formatted content and media as they would appear on the website.
8. The Writer either edits the article (returning to step 3) or selects "Submit for Review."
9. The system saves the article as a draft and notifies the Editor via email or CMS notification that a new article is pending review.
10. The system confirms to the Writer that the article has been successfully *submitted for review*.

2.2 Alternative Flows

2.2.1 Invalid Input

- If the Writer submits the article with incomplete or invalid data, the system displays an error message specifying the issue.
- The Writer corrects the errors and resubmits the form (returns to Basic Flow step 3).

2.2.2 Save as Draft

- At any point after entering some data, the Writer selects "Save as Draft" instead of submitting.
- The system saves the current state of the article in the CMS and allows the Writer to return to it later.
- The use case ends, and no notification is sent to the Editor.

3. Special Requirements

3.1 Rich Text Formatting

The CMS must support rich text formatting (e.g., bold, italics, hyperlinks, bullet lists) for the article body.

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3.2 Browser Compatibility

The system must ensure compatibility with common browsers (e.g., Chrome, Firefox, Safari) for the article creation interface.

3.3 Media Upload Handling

The system must handle media uploads up to 10 MB per file and support JPEG, PNG, and MP4 formats.

3.4 Performance

The article submission process must be completed within 5 seconds under normal server load.

3.5 Data Privacy

The system must comply with GDPR for handling any personal data included in articles or media.

4. Preconditions

4.1 Writer Authentication

The Writer must be registered and logged into the CMS with valid credentials.

4.2 Writer Permissions

The Writer must have the role of "Writer" with permissions to create articles.

4.3 System Accessibility

The CMS must be accessible and operational.

5. Postconditions

5.1 Article Storage

The article is saved in the CMS as a draft or submitted for editorial review.

5.2 Editor Notification

If submitted, the Editor is notified of the pending article.

5.3 Writer Confirmation

The Writer receives confirmation of successful submission or draft save.

6. Extension Points

6.1 Add Co-Author

- Location: Basic Flow, step 3.
- The Writer can add a co-author by entering their registered email or selecting from a list of Writers in the CMS. The system notifies the co-author and grants them edit access to the article.

7. Low Fidelity Prototype For Use Case

7.1 Prompt Used for AI Tool

- Create a test page at /test/create-article for my Digital Newspaper Website that simulates the full 'Create Article' use case.
- Functional Requirements: [2. Flow of Event 6.Extension Points] (*Paste the use case specification from section 2 to 6 here*)

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7.2 Generated Interface

The screenshot displays the VietNews digital newspaper website's article creation interface. At the top, there is a header with the logo 'VN VietNews', a search bar, and navigation links for 'Thời sự', 'Thế giới', 'Kinh doanh', 'Công nghệ', 'Thể thao', 'Giải trí', 'Sức khỏe', and 'Du lịch'. On the right side of the header are 'Đăng nhập' and 'Đăng ký' buttons.

The main content area is titled 'Tạo bài viết mới' (Create Article) and shows a progress bar indicating 'Bước 1 / 3'. A large text input field labeled 'Nhập nội dung' (Enter content) is present. Below it, there are sections for 'Thông tin bài viết' (Article information), 'Tiêu đề' (Title), 'Danh mục' (Category), 'Nội dung' (Content), 'Thẻ (Tags)' (Tags), 'Hình ảnh / Video' (Image / Video), and 'Đồng tác giả (tùy chọn)' (Co-author (optional)). The 'Nội dung' section includes a rich text editor toolbar and a note about supported file types: PDF, JPEG, PNG, GIF, MP4, MOV, and DOCX, with a maximum size of 10MB per file.

At the bottom of the form are 'Lưu nhập' (Save and continue) and 'Tiếp theo →' (Next) buttons. The footer of the page contains a navigation menu with links to 'Thời sự', 'Thế giới', 'Kinh doanh', 'Công nghệ', 'Thể thao', 'Giải trí', 'Về chúng tôi', 'Liên hệ', 'Quảng cáo', 'Tuyển dụng', 'RSS Feed', and 'Sitemap'. It also includes social media icons for Facebook, Twitter, YouTube, and Instagram, and contact information: 'Tầng 10, Tòa nhà ABC, 123 Đường XYZ, Quận 1, TP. Hồ Chí Minh', phone number '+84 28 1234 5678', and email 'contact@vietnews.com'. The footer also states '© 2025 VietNews. Tất cả quyền được bảo lưu.' and provides links to 'Chính sách bảo mật', 'Điều khoản sử dụng', and 'Chính sách Cookie'.

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VietNews Đăng nhập Đăng ký

Thời sự | Thế giới | Kinh doanh | Công nghệ | Thể thao | Giải trí | Sức khỏe | Du lịch

Tạo bài viết mới

Bước 2 / 3 Xem trước

Xem trước bài viết
Kiểm tra lại nội dung trước khi gửi duyệt

Công nghệ

Trí tuệ nhân tạo đang thay đổi ngành báo chí như thế nào?

Nguyễn Văn A
Đóng góp: tran.thi.b@vietnews.com
19/7/2025 • Bản nháp

 Newsroom-One.jpg

Bạn có thể sử dụng:

- Phân tích dữ liệu để cá nhân hóa nội dung cho độc giả.
- AI trong biên tập để kiểm tra chính tả, ngữ pháp và để xuất chính sửa.
- Liên kết [https://example.com/ai-newsroom] để tìm hiểu thêm.
- Danh sách các công cụ như ChatGPT, Grammarly, và Jasper.

← Chính sửa Gửi duyệt

VietNews
Trang tin tức hàng đầu Việt Nam, cung cấp thông tin chính xác, kịp thời về các lĩnh vực kinh tế, xã hội, công nghệ và đời sống.
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Danh mục

- Thời sự
- Thế giới
- Kinh doanh
- Công nghệ
- Thể thao
- Giải trí

Dịch vụ

- Về chúng tôi
- Liên hệ
- Quảng cáo
- Tuyển dụng
- RSS Feed
- Sitemap

Liên hệ

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Chính sách bảo mật | Điều khoản sử dụng | Chính sách Cookie

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The screenshot shows the VietNews website interface. At the top, there is a navigation bar with the logo 'VN VietNews', a search bar, and links for 'Đăng nhập' (Login) and 'Đăng ký' (Register). Below the navigation bar, there is a horizontal menu with categories: Thời sự, Thế giới, Kinh doanh, Công nghệ, Thể thao, Giải trí, Sức khỏe, and Du lịch.

The main content area displays a progress bar indicating 'Bước 3 / 3' (Step 3 / 3) and 'Hoàn thành' (Completed). A green circular icon with a checkmark is present. The text 'Bài viết đã được gửi duyệt!' (The article has been submitted for review!) is displayed, along with a note: 'Bài viết "Trí tuệ nhân tạo đang thay đổi ngành báo chí như thế nào?" đã được gửi thành công đến ban biên tập để xem xét.' (The article "How is artificial intelligence changing the journalism industry?" has been successfully submitted to the editorial board for review.)

Below this, a message states: 'Bạn sẽ nhận được thông báo qua email khi bài viết được phê duyệt hoặc cần chỉnh sửa.' (You will receive an email notification when the article is approved or needs editing.)

At the bottom of the page, there is a footer section with the 'VN VietNews' logo and social media icons. It includes a 'Danh mục' (Category) section listing: Thời sự, Thế giới, Kinh doanh, Công nghệ, Thể thao, Giải trí. A 'Dịch vụ' (Service) section lists: Về chúng tôi, Liên hệ, Quảng cáo, Tuyển dụng, RSS Feed, Sitemap. An 'Liên hệ' (Contact) section provides address (Tầng 10, Tòa nhà ABC, 123 Đường XYZ, Quận 1, TP. Hồ Chí Minh), phone number (+84 28 1234 5678), and email (contact@vietnews.com). The footer also includes links for 'Chính sách bảo mật' (Privacy Policy), 'Điều khoản sử dụng' (Terms of Use), and 'Chính sách Cookie' (Cookie Policy).

404 Not Found

**Digital Newspaper Website
Use-Case Specification: Log Out**

Version 1.0

Digital Newspaper Website	Version: 1.0
Use-Case Specification: Log Out	Date: 31/7/2025
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Revision History

Date	Version	Description	Author
1/7/2025	1.0	Complete the document	Lê Đình Minh Quân

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Use-Case Specification: Log Out

1. Use-Case Name: Log Out

1.1 Brief Description

The *Log Out* use case describes how an authenticated User (Writer, Editor, Admin, or any signed-in role) securely ends an active session in the Digital Newspaper Website. The system invalidates session tokens, clears sensitive client-side data, and returns the User to a public (unauthenticated) state.

2. Flow of Events

2.1 Basic Flow

Actor: User (any authenticated role)

Precondition: User is currently logged in.

Trigger: User chooses to log out.

1. User clicks **Log Out** (e.g., in header menu, profile dropdown, or side navigation).
2. The system optionally shows a brief “*Signing out...*” indicator (omit if the operation completes almost instantly).
3. System invalidates the active server session (destroys server session object and/or revokes refresh token).
4. The system instructs clients to clear all authentication artifacts: access token, refresh token (if locally stored), cached role/permission data, user profile cache.
5. System clears or overwrites any “*remember me*” cookie if the user did **not** opt into persistent login; if persistent login was enabled, only the minimal secure refresh mechanism (no active access token) remains.
6. System records an audit log event with details (userId, timestamp, IP, userAgent, action=LOG_OUT, scope=single).
7. System redirects the user to the public landing page (or a dedicated “You have signed out” page).
8. System displays a confirmation message (e.g., “You have successfully logged out.”) or transient toast.
9. User may continue browsing public content or initiate a new login (use case ends).

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2.2 Alternative Flows

2.2.1 Network Failure During Logout

Point of deviation: After Step 1, before Step 7.

1. Session invalidation request times out or network error occurs.
2. Client prompts: "Network issue — unable to complete log out. Retry?"
3. If the user selects **Retry**, resume at Basic Flow Step 2.
4. If the user selects **Cancel**, the session remains active; the user stays in an authenticated view with a clear status message.

2.2.2 Session Already Expired

Point of deviation: Step 3.

1. The system detects the token already expired/invalid.
2. The system still clears local auth artifacts (equivalent to Steps 4–5).
3. System logs audit event with reason=ALREADY_INVALID.
4. Flow rejoins Basic Flow at Step 7.

2.2.3 Global (All Devices) Logout Selected

Point of deviation: Step 3 (user chose "Log out all devices").

1. The system invalidates all active sessions across devices.
2. System logs audit event with scope=GLOBAL.
3. Flow rejoins Basic Flow at Step 7.

2.2.4 Unsaved Changes Warning

Point of deviation: Step 1.

1. The user has unsaved draft edits.
2. System prompts: "You have unsaved changes. Log out anyway?"
3. If **Cancel**, use case ends (no logout).
4. If **Log Out Anyway**, continue at Basic Flow Step 2.

2.2.5 Forced Security Logout

Point of deviation: Before Step 1 (system-initiated).

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1. Security rules (password reset, role revoked, suspicious activity) forces termination.
2. On the next request, the system invalidates the session and redirects to login with message: "Your session has ended. Please sign in again."
3. Use case terminates (no user-initiated trigger).

2.2.6 Accessibility / Keyboard Invocation

Point of deviation: Step 1.

1. The user activates the logout entirely via keyboard / assistive tech.
2. Flow proceeds equivalently from Basic Flow Step 2.

3. Special Requirements

- **Security:** Revoke server session & refresh tokens; clear client tokens and cached identity data.
- **CSRF Protection:** Logout endpoint protected (anti-CSRF token or SameSite=strict, POST/DELETE).
- **Privacy:** No user identity/role info remains client-side post Step 4.
- **Performance:** Perceived logout ≤ 2 s; if > 1 s show progress indicator.
- **Auditability:** Log every logout (normal, expired, forced, global) with scope & reason.
- **Resilience:** Network failure path (2.2.1) offers retry to avoid ambiguous state.
- **Accessibility:** Control is focusable, labeled (e.g., `aria-label="Log Out"`), keyboard operable.
- **Multi-Device:** Global logout (2.2.3) completes ≤ 5 s for ≤ 20 active sessions.
- **Localization:** All messages localizable.
- **Compliance:** Conforms to internal security policy & OWASP ASVS session management.

4. Preconditions

- Valid authenticated sessions exist.
- Auth / session infrastructure operational.
- Logout control visible or discoverable (accessible).
- (If global logout) User role permitted to invalidate all sessions.

5. Postconditions

- **Success:** Session (and optionally all sessions) invalidated; client auth data cleared; user in public state.

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- **Partial Retry State:** On network failure + user cancel, session remains valid and user informed.
- **Forced Logout:** Session invalidated by system; user redirected to login with message.

6. Extension Points

- **Survey Prompt:** After Basic Flow Step 7 show optional feedback modal.
- **Single Sign-On Propagation:** Extend Step 3 to notify Identity Provider.
- **Idle Timeout Warning:** Precedes 2.2.5 offering "Stay signed in".
- **Clear Client Drafts:** Hook in Step 4 to purge local unsaved drafts.

7. Low Fidelity Prototype For Use Case

Prompt for AI tools: Create 3 new React/Next.js pages for my existing Digital Newspaper Website. Use the same visual style, layout components (e.g., header, footer, sidebar), fonts, and responsive breakpoints as the rest of the site. Each page should simulate the following UI use cases for testing: Log Out Page (/test/logout), Simulate a logout confirmation view. Show a brief 'Signing out...' indicator. Then display: "You have successfully logged out." Include a button to return to the homepage. Match existing site's colors, font, and spacing. All pages should be self-contained and follow the overall site design using existing components (e.g., Layout, Button, Card, etc.)."

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The screenshot shows the VietNews website interface. At the top, there is a navigation bar with links for Thời sự, Thế giới, Kinh doanh, Công nghệ, Thể thao, Giải trí, Sức khỏe, and Du lịch. A search bar is also present. On the right side of the header are buttons for Đăng nhập and Đăng ký.

The main content area features a central box with the VietNews logo and the title "Đăng xuất thành công". It includes a green circular icon with a checkmark, a success message "Bạn đã đăng xuất thành công!", and a note thanking the user for using VietNews. Below this are two buttons: "Về trang chủ" and "[<] Đăng nhập lại".

At the bottom of the page, there is a footer section with the VietNews logo and social media icons (Facebook, Twitter, YouTube, Instagram). The footer is divided into four columns: "Danh mục" (Thời sự, Thế giới, Kinh doanh, Công nghệ, Thể thao, Giải trí), "Dịch vụ" (Về chúng tôi, Liên hệ, Quảng cáo, Tuyển dụng, RSS Feed, Sitemap), and "Liên hệ" (Address: Tầng 10, Tòa nhà ABC, 123 Đường XYZ, Quận 1, TP. Hồ Chí Minh; Phone: +84 28 1234 5678; Email: contact@vietnews.com).

At the very bottom, there is a copyright notice: "© 2025 VietNews. Tất cả quyền được bảo lưu." and links to "Chính sách bảo mật", "Điều khoản sử dụng", and "Chính sách Cookie".

404 Not Found

**Digital Newspaper Website
Use-Case Specification: Verify MFA code**

Version 1.0

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Revision History

Date	Version	Description	Author
18/07/2025	1.0	Complete the document	Lê Đình Minh Quân

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Use-Case Specification: Verify MFA Code

1. Use-Case Name: Verify MFA Code

1.1 Brief Description

The *Verify MFA Code* use case describes how a partially authenticated User (after successful primary credential entry) completes multi-factor authentication (MFA) by submitting a one-time code (OTP) delivered via an approved second factor (e.g., authenticator app TOTP, SMS, email fallback, hardware key challenge, or push approval). The system validates the code or challenge response, establishes a fully authenticated session with appropriate assurance level, and enforces retry, lockout, and security policies.

2. Flow of Events

2.1 Basic Flow

Actor: User (partially authenticated; primary login successful)

Precondition: Primary credentials accepted; system requires MFA; a valid MFA factor is enrolled and a current one-time code (or challenge) is available to the user.

Trigger: System presents MFA verification prompt.

1. The system displays the **MFA verification screen** indicating the active factor (e.g., “Enter the 6-digit code from your authenticator app”).
2. The user enters the MFA code (or responds to the presented factor, e.g., types TOTP, approves push, taps hardware key).
3. System normalizes and validates input format (trims spaces, rejects non-digits if TOTP).
4. The system verifies the code/challenge against the factor source (e.g., TOTP time window, push approval status, WebAuthn signature).
5. System checks **attempt counters** (e.g., max consecutive failures) and **token freshness / time drift**.
6. On success, the system elevates the session from *partial* to *fully authenticated*, sets MFA assurance attributes (e.g., mfaLevel = strong, authn_time = timestamp).
7. System clears transient MFA state (e.g., pending challenge IDs, temporary cookies).
8. System redirects users to the originally requested protected resource (or default post-login landing page).
9. System logs an audit event { userId, factorType, outcome = SUCCESS, ip, userAgent, timestamp }.
10. The user continues with full privileges (use case ends).

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2.2 Alternative Flows

2.2.1 Invalid Code (Single Failure)

Point of deviation: Step 4.

1. *Code does not match expected value (wrong digits, incorrect WebAuthn signature, push denied).*
2. *System increments failure counter and logs failure event.*
3. *System informs user: "Invalid code. Please try again." and re-prompts (remaining attempts indicated).*
4. *Flow returns to Basic Flow Step 2 (unless lockout reached).*

2.2.2 Code Expired / Time Window Drift

Point of deviation: Step 4.

1. *Code structure correct but outside valid time window (TOTP drift, expired SMS).*
2. *System shows: "Code expired. Request or generate a new code."*
3. *(If drift is small and policy allows) system suggests user resync device time.*
4. *Flow returns to Basic Flow Step 1 (or Step 2 after new code entry).*

2.2.3 Maximum Attempts Reached (Temporary Lockout)

Point of deviation: After repeated executions of 2.2.1.

1. *Failure counter hits configured threshold (e.g., 5 attempts).*
2. *The system locks further attempts for a cooldown period (e.g., 5 minutes) and logs outcome {outcome = LOCKOUT}*
3. *The system displays a lockout message with remaining wait time.*
4. *Use case ends (user may retry after cooldown → re-enter from Basic Flow Step 1).*

2.2.4 Factor Not Available (User Lost Device)

Point of deviation: Step 1 (user cannot supply code).

1. *The user selects the "I can't access my authenticator" link.*
2. *The system offers enrolled **backup factors** (e.g., backup codes, SMS, email, hardware key) per policy hierarchy.*

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3. *The user selects a backup factor → system sends / prompts for that factor's challenge.*
4. *Flow resumes at Basic Flow Step 2 for the new factor.*
5. *System marks event with **factorFallback = true**.*

2.2.5 Using a Backup Recovery Code

Point of deviation: Step 2.

1. *The user enters one of their one-time backup recovery codes instead of standard factor code.*
2. *System matches hash; if valid, marks code as **consumed** (cannot reuse).*
3. *The system proceeds at Basic Flow Step 6 (successful elevation) and logs **factorType = RECOVERY_CODE**.*
4. *The system warns the user if remaining recovery codes are low (e.g., ≤2).*

2.2.6 Push Notification Factor (Approval Flow)

Point of deviation: Step 2 (factor = push).

1. *Instead of entering digits, the user receives a push prompt on the device and taps **Approve**.*
2. *System polls or gets callback; on approval continues at Basic Flow Step 6.*
3. *If the user taps **Deny** (or times out), treat it as failure → go to 2.2.1 logic.*

2.2.7 Hardware Security Key (WebAuthn) Factor

Point of deviation: Step 2 (factor = hardware key).

1. *System initiates WebAuthn challenge in browser; user taps key or provides biometric.*
2. *System verifies signature (credential ID, origin, counter).*
3. *On success resume at Basic Flow Step 6; on failure resume at 2.2.1.*

2.2.8 Fallback to Primary Re-Authentication (Session Stale)

Point of deviation: Step 5.

1. *The system detects partial sessions have exceeded allowed pre-MFA age.*

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2. System discards partial session and redirects user back to primary login (restarts overall authentication).
3. After successful primary login again, flow returns to Basic Flow Step 1.

2.2.9 Forced Step-Up During Active Session

Point of deviation: External protected action requests higher assurance while the user is already logged in at a lower level.

1. The user tries a sensitive operation (e.g., change password, view PII).
2. System interrupts with MFA verification (step-up).
3. On success proceed to protected action (outside this use case's scope).
4. On failure follow alternative flows 2.2.1–2.2.3; if abandoned, action is canceled.

2.2.10 Suspicious Attempt (Risk Engine Intervention)

Point of deviation: Step 4.

1. Risk engine flags anomalies (geo-velocity, device mismatch).
2. The system requires additional factors (step-up inside step-up) or denies attempt.
3. If additional factor pass, resume at Basic Flow Step 6; if denied, record **outcome = RISK_DENY** and end use case.

2.2.11 Session Continuation After Partial Failures

Point of deviation: Repeated Step 2 with intermittent failures below lockout threshold.

1. The user fails once or twice but later provides a correct code within allowed attempts/time.
2. The system resets consecutive failure counters after success.
3. Flow rejoins Basic Flow Step 6.

2.2.12 User Cancels Verification

Point of deviation: Step 2.

1. User clicks **Cancel** / closes dialog.
2. System discards partial session or returns to primary login screen with message "MFA required to continue."

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3. *Use case ends (no elevation).*

3. Special Requirements

- **Security:** Support multiple factors (TOTP, WebAuthn, push, backup codes) per enrolled configuration; verification must resist replay (nonce/time-based).
- **Time Drift Handling:** Accept TOTP codes within configurable \pm time window (e.g., $\pm 30s$) while logging drift if $>$ expected.
- **Rate Limiting:** Enforce per-user and per-IP attempt throttling (e.g., exponential backoff after repeated failures).
- **Lockout Policy:** Configurable thresholds; lockout events auditable.
- **Data Protection:** Never log raw codes; only success/failure metadata.
- **Accessibility:** All form controls keyboard-navigable; labels tied to inputs; announce errors via ARIA live region.
- **Internationalization:** Error and instruction messages localizable.
- **Device Binding:** WebAuthn requires origin and RP ID match; counters monitored to detect cloned keys.
- **Privacy:** Minimize PII in audit logs; no factor secrets stored in plain text.
- **Performance:** Verification round trip < 1 second 95th percentile (excluding user entry time).
- **Resilience:** Retry guidance offered after transient network errors.
- **Compliance:** Align with MFA policy (e.g., NIST 800-63B AAL2+) for enrolled factors.
- **Telemetry:** Emit structured events for success, failure, lockout, fallback use.

4. Preconditions

- The user completed primary credential authentication (username/password or SSO) and is in partial session state.
- At least one MFA factor is enrolled and active.
- MFA enforcement policy requires verification for this login or step-up action.
- Verification service (TOTP validator, WebAuthn API, push service) is operational.

5. Postconditions

- **Success:** Session promoted to fully authenticated with recorded assurance level; failure counters reset.

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- **Lockout:** User blocked from further verification attempts until cooldown ends; partial session may be invalidated.
- **Abandon / Cancel:** Partial session terminated or left unusable for protected resources.
- **Fallback Success:** Backup or alternative factor verified; session elevated with **factorFallback = True**.
- **Risk Denied:** Attempt blocked; security alert optionally raised.

6. Extension Points

- **Adaptive Factor Selection:** Insert between Basic Flow Steps 1–2 to dynamically choose factor based on risk scoring.
- **Remember Device (Trusted Device Cookie):** After Step 6, optionally set a signed “trusted device” token to skip MFA for low-risk future logins.
- **Device Time Sync Suggestion:** During 2.2.2 offer a one-click “Sync Time” helper or instructions.
- **Additional Consent Prompt:** After Step 6 for sensitive administrative consoles.

7. Low Fidelity Prototype For Use Case

Prompt for AI tools: Enhance the /test/verify-mfa pages of my Digital Newspaper Website to simulate realistic, step-by-step processes. Use the same layout, design system, and UX style as the rest of the website. Include all typical stages described in the use-case specifications.  /test/verify-mfa – Multi-Factor Authentication FlowImplement a multi-step, interactive MFA verification process:Step 1 – Prompt for Code:Ask the user to enter a 6-digit code from an authenticator app (TOTP).Show fallback links: “Use backup code”, “Try a different method”.Include a live countdown (e.g., “Code expires in 30s”).Step 2 – Handle Invalid Code>Show error on incorrect input with retry counter (e.g., “2 attempts left”).After 3 failed attempts, lock verification for 5 minutes.Step 3 – Fallback Options:Let the user choose alternative methods: backup code, email, hardware key.Simulate each with mock inputs and success/failure.Step 4 – Success>Show confirmation: “Verification successful.”Auto-redirect to dashboard or show “Continue” button.

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The screenshot shows the VietNews website's main navigation bar at the top, featuring the logo 'VN VietNews', a search bar with placeholder text 'Tim kiem tin tức...', and links for 'Đang nhập' (Log in) and 'Đang ký' (Log sign up). Below the navigation, a horizontal menu includes 'Thời sự', 'Thế giới', 'Kinh doanh', 'Công nghệ', 'Thể thao', 'Giải trí', 'Sức khỏe', and 'Du lịch'. The main content area displays a 'Xác thực bảo mật hai lớp' (Two-step verification) dialog box. The dialog has a shield icon and the title 'Nhập mã xác thực' (Enter verification code). It states: 'Chúng tôi đã gửi mã 6 số đến ứng dụng xác thực của bạn' (We have sent a 6-digit code to your verification app). A note says 'Mã hết hạn sau: 24s' (Code expires after: 24s). Below is a field labeled 'Mã xác thực 6 số' (6-digit verification code) with six empty input boxes. A large 'Xác thực' (Verify) button is centered below the code field. At the bottom of the dialog, there are three options: 'Gặp vấn đề?' (Have a problem?), 'Sử dụng mã dự phòng' (Use backup code), and 'Thủ phương thức khác' (Other verification method). A note at the very bottom of the dialog reads: 'Để bảo mật tài khoản, vui lòng không chia sẻ mã xác thực với bất kỳ ai.' (To protect your account, please do not share the verification code with anyone.).

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Thời sự Thế giới Kinh doanh Công nghệ Thể thao Giải trí Sức khỏe Du lịch

Xác thực bảo mật hai lớp

Nhập mã xác thực

Chúng tôi đã gửi mã 6 số đến ứng dụng xác thực của bạn

⌚ Mã hết hạn sau: 24s

Mã xác thực 6 số

Xác thực

Gặp vấn đề?

⌚ Sử dụng mã dự phòng

⌚ Thủ phương thức khác

Để bảo mật tài khoản, vui lòng không chia sẻ mã xác thực với bất kỳ ai.

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- RSS Feed
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Tim kiếm tin tức...

Đăng nhập Đăng ký

Thời sự Thế giới Kinh doanh Công nghệ Thể thao Giải trí Sức khỏe Du lịch

Xác thực bảo mật hai lớp

Phương thức khác

Chọn phương thức xác thực thay thế

Mã dự phòng Email Khóa cứng

Nhập mã dự phòng

BACKUP123

Sử dụng một trong các mã dự phòng 8 ký tự bạn đã lưu khi thiết lập MFA.

Xác thực mã dự phòng

← Quay lại nhập mã

Để bảo mật tài khoản, vui lòng không chia sẻ mã xác thực với bất kỳ ai.

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Xác thực bảo mật hai lớp

Phương thức khác

Chọn phương thức xác thực thay thế

Mã dự phòng Email Khóa cứng

Mã xác thực đã được gửi đến email của bạn

Nhập mã từ email

789012

Xác thực mã email

← Quay lại nhập mã

Để bảo mật tài khoản, vui lòng không chia sẻ mã xác thực với bất kỳ ai.

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Xác thực bảo mật hai lớp

Phương thức khác
Chọn phương thức xác thực thay thế

Mã dự phòng Email **Khóa cứng**



Khóa bảo mật phần cứng
Cắm khóa USB hoặc chạm vào khóa NFC để xác thực

Sử dụng khóa cứng

← Quay lại nhập mã

Để bảo mật tài khoản, vui lòng không chia sẻ mã xác thực với bất kỳ ai.

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The screenshot shows the VietNews website interface. At the top, there is a navigation bar with the logo 'VN VietNews', a search bar containing 'Tim kiếm tin tức...', and buttons for 'Đăng nhập' (Login) and 'Đăng ký' (Register). Below the navigation bar, there is a horizontal menu with links: Thời sự, Thế giới, Kinh doanh, Công nghệ, Thể thao, Giải trí, Sức khỏe, and Du lịch.

The main content area displays a modal window titled 'Xác thực thành công!' (Verification successful!). Inside the modal, it says 'Tài khoản của bạn đã được xác thực an toàn' (Your account has been successfully verified). A green checkmark icon is present. Below the message is a button labeled 'Tiếp tục vào Dashboard' (Continue to Dashboard).

At the bottom of the page, there is a footer section with the 'VN VietNews' logo, social media icons (Facebook, Twitter, YouTube, Instagram), and a brief description: 'Trang tin tức hàng đầu Việt Nam, cung cấp thông tin chính xác, kịp thời về các lĩnh vực kinh tế, xã hội, công nghệ và đời sống.' Below this, there are four columns: 'Danh mục' (Thời sự, Thế giới, Kinh doanh, Công nghệ, Thể thao, Giải trí), 'Dịch vụ' (Về chúng tôi, Liên hệ, Quảng cáo, Tuyển dụng, RSS Feed, Sitemap), and 'Liên hệ' (Address: Tầng 10, Tòa nhà ABC, 123 Đường XYZ, Quận 1, TP. Hồ Chí Minh; Phone: +84 28 1234 5678; Email: contact@vietnews.com).

The footer also includes copyright information: '© 2025 VietNews. Tất cả quyền được bảo lưu.' and links to 'Chính sách bảo mật', 'Điều khoản sử dụng', and 'Chính sách Cookie'.

404 Not Found

**Digital Newspaper Website
Use-Case Specification: Check Plagiarism**

Version 1.0

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Revision History

Date	Version	Description	Author
18/07/2025	1.0	Complete the document	Lê Đình Minh Quân

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Use-Case Specification: Check Plagiarism

1. Use-Case Name

1.1 Brief Description

The *Check Plagiarism* use case describes how an authorized User (e.g., Writer, Editor, or Admin) submits an article draft (or selected text) to the plagiarism detection service. The system analyzes the content against internal repositories, previously published articles, and external sources (via integrated plagiarism API / search indexes) and returns a similarity report with matched segments, sources, and an overall similarity percentage. The outcome guides editorial decisions (revise, cite sources, reject, or approve).

2. Flow of Events

2.1 Basic Flow

Actor: Writer or Editor (authenticated; has permission to run plagiarism checks)

Preconditions: Draft article exists in the system and is accessible to the Actor; plagiarism service is operational; content length within allowed limits.

Trigger: Actor initiates a plagiarism check (e.g., clicks “**Check Plagiarism**” or saves draft with auto-check enabled).

1. Actor opens the draft and selects **Check Plagiarism**.
2. System validates prerequisites: user permission, draft state (not empty), size limits.
3. System normalizes content (strip markup, unify line endings, lowercase as needed, remove stop sections like boilerplate disclaimers per policy).
4. System packages normalized text with metadata (document ID, language, author ID, timestamp) and submits request to the plagiarism engine.
5. System displays a “*Scanning for similarity...*” progress indicator (with optional estimated time if > few seconds).
6. Plagiarism engine tokenizes and compares content against: (a) internal published corpus, (b) internal draft archive (other users’ drafts if permissible), (c) cached external index results / third-party API.
7. Engine produces a similarity report (overall percentage, list of matched passages, source identifiers, match confidence, match types).
8. System stores the raw report and derives a summarized view (highlight spans, aggregated percentages by source).
9. System displays the plagiarism results to the Actor: overall similarity %, critical matches flagged above configured threshold(s), color-highlighted overlapping segments.
10. System logs an audit event `{userId, docId, action=PLAGIARISM_CHECK,`

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`similarity=<value>, timestamp}.`

11. Actor reviews results and decides next action (revise, cite, request exemption, or mark as clean). Use case ends on decision.

2.2 Alternative Flows

2.2.1 Large Document – Asynchronous Processing

Point of deviation: Step 4.

1. If content size exceeds synchronous threshold, system queues job and returns a “Scan queued” status.
2. Actor sees queued indicator and may continue editing.
3. Background worker completes analysis and updates report.
4. System notifies Actor (in-app notification or email) → Actor opens report (resume at Basic Flow Step 9).

2.2.2 External Service Timeout / Unavailable

Point of deviation: Step 6.

1. External API times out or returns 5xx.
2. System retries per backoff policy (e.g., 2 more attempts).
3. If still failing, system returns partial internal corpus results + message “External sources temporarily unavailable.”
4. Actor may retry manually later (return to Step 1) without losing draft state.

2.2.3 Insufficient Permissions

Point of deviation: Step 2.

1. User lacks required role/permission.
2. System denies request, shows “You are not authorized to perform plagiarism checks.”
3. Audit event logged with outcome=DENIED.
4. Use case ends (no scan performed).

2.2.4 Content Too Short / Too Long

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Point of deviation: Step 2 or 3.

1. Content length below minimum tokens (e.g., < 50 words) or above maximum (e.g., > 20,000 words).
2. System displays validation message specifying limit and prevents submission.
3. Actor adjusts content length and re-initiates (return to Step 1).

2.2.5 Duplicate Pending Scan

Point of deviation: Step 4.

1. An identical hash for this draft is already processing.
2. System merges request or informs Actor “A scan is already in progress.”
3. Actor waits or views pending status (resume at Step 9 once complete).

2.2.6 High Similarity Threshold Breach (Critical Alert)

Point of deviation: Step 9.

1. Overall similarity or single-source match exceeds critical threshold (e.g., > 40%).
2. System flags report as **Critical** and (if configured) notifies Editor / Admin.
3. Actor must choose between revising or requesting formal review before publication (publication workflow blocked until resolved).

2.2.7 Exact Self-Match Only

Point of deviation: Step 7.

1. All matches are the author’s previously published articles (self-plagiarism).
2. System categorizes these separately (self-matches) and may reduce their weighting per policy.
3. Actor views adjusted similarity (rejoins Step 9).

2.2.8 Significant Quoted / Properly Cited Material

Point of deviation: Step 8 / 9.

1. Large portions flagged but enclosed in quotes or have citations (e.g., references or block quotes).
2. System applies citation detection rules to discount properly cited spans from final critical percentage (but still shows them).
3. Revised similarity displayed to Actor (Step 9).

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2.2.9 Language Detection Mismatch

Point of deviation: Step 3.

1. Detected language differs from expected or mixed language detected.
2. System switches or augments comparison indexes accordingly.
3. Flow resumes at Step 4 without user interruption.

2.2.10 Policy Update During Scan

Point of deviation: Step 6.

1. Internal similarity thresholds changed mid-scan (e.g., Admin updates config).
2. System re-applies new thresholds to results before presenting Step 9.
3. Actor sees badge “Threshold updated during scan” for transparency.

2.2.11 Manual Cancellation by Actor

Point of deviation: Step 5 (asynchronous or long scan).

1. Actor clicks **Cancel Scan**.
2. System attempts to abort queued job; if already running, marks result stale on completion.
3. System logs cancellation outcome and informs Actor.
4. Use case ends (no report delivered unless job already finished early).

2.2.12 Integrity Check Failure (Tampered Content)

Point of deviation: Step 4 or 6.

1. Content hash on completion does not match original submission hash (draft changed mid processing without snapshot).
2. System flags integrity error, discards report, and requests a new scan.
3. Actor re-initiates (Step 1) after confirming stable draft.

2.2.13 Risk Engine Anomaly (Unusual Source Pattern)

Point of deviation: Step 7 / 8.

1. Many short matches from diverse unrelated sources trigger risk heuristic.

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2. System elevates severity, optionally prompts for manual editorial review.
3. Actor cannot mark as “Clean” until review resolution (then resumes Step 11 decision).

2.2.14 Backup Source Index Offline

Point of deviation: Step 6.

1. Secondary (supplemental) index offline; primary still available.
2. System returns report with note “Some secondary sources unavailable.”
3. Actor may accept partial report or schedule re-scan.

2.2.15 Automatic Re-Scan on Revision

Point of deviation: After Step 11 (post decision).

1. Actor modifies content above configured change threshold (e.g., >15% new tokens) within a freshness window.
2. System triggers auto re-scan (notify Actor) and updates report (returns to Step 9).

3. Special Requirements

- **Accuracy:** Matching must minimize false positives via token n-gram overlap + fuzzy matching (stemmed / case-insensitive); properly cited/quoted sections discountable.
- **Performance:** Synchronous scans ≤ 8 seconds 95th percentile for average article length (e.g., ≤1500 words); async path handles larger documents.
- **Scalability:** Horizontal scaling for parallel scans; queue throughput target (e.g., 50 scans/minute baseline).
- **Security:** Submitted text transmitted over TLS; stored reports encrypted at rest; external API keys secured.
- **Privacy:** Do not expose private drafts from other authors unless access policy permits; anonymize user IDs in external requests if required.
- **Auditability:** Log each scan with docId, userId, similarity percentage, source counts, outcome (SUCCESS / PARTIAL / FAILED / CANCELED).
- **Configurability:** Thresholds (warning %, critical %, self-match discount) adjustable without redeploy.
- **Internationalization:** Multi-language tokenization & stemming; UI messages localizable.
- **Accessibility:** Results highlighting navigable via keyboard; color distinctions paired with text labels.

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- **Reliability:** Retry logic for transient external failures; gracefully degrade to internal-only results.
- **Integrity:** Snapshot hash ensures the report matches the analyzed content version.
- **Legal / Compliance:** Retain reports for defined retention period (e.g., 1 year) then purge per policy.

4. Preconditions

- User authenticated and authorized for plagiarism checks.
- Draft content saved (not empty) and within permissible size range.
- Plagiarism engine and required indices reachable.
- Configured thresholds and policies loaded successfully.

5. Postconditions

- **Success:** Similarity report stored; Actor informed; decision pending editorial action.
- **Partial:** External sources missing; internal results delivered with notice.
- **Failure:** Scan aborted (timeout, integrity error); no final report; Actor prompted to retry.
- **Canceled:** User aborted; any late result marked stale.
- **Critical:** High similarity flagged; publication workflow gated pending remediation.
- **Auto Re-Scan Scheduled:** Content change triggers queued new scan.

6. Extension Points

- **Auto Citation Suggestions:** After Step 9, propose citation formatting for unmatched raw quotations.
- **Machine Learning False Positive Filter:** Between Steps 7–8 reclassify borderline matches.
- **Similarity Trend Analytics:** After Step 10, aggregate metrics for dashboards (average similarity per author).
- **Inline Rewrite Assistant:** Post Step 9 launches a guided paraphrasing assistant for flagged passages.

7. Low Fidelity Prototype For Use Case

Prompt for AI tools: Enhance the /test/plagiarism-report pages of my Digital Newspaper Website to simulate realistic, step-by-step processes. Use the same layout, design system, and UX style as the rest of

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the website. Include all typical stages described in the use-case specifications.  /test/plagiarism-report – Plagiarism Checking SimulationCreate a full plagiarism detection workflow:Step 1 – Draft Input:Allow selecting a saved draft or pasting article content.Validate length: warn if too short (<50 words) or too long (>20,000).Include “Run Check” button.Step 2 – Scanning:Show loading screen: “Scanning for similarity...” with animated progress.Simulate delay or mock API response.Step 3 – Results Display:Show:Overall similarity score (e.g., 32%)List of matching sources with confidence barsHighlighted matched segments in article contentUse different colors for critical (red), warning (orange), and clean (green) matches.Step 4 – Decision:If score is high, show alert and block submission.Buttons: “Revise”, “Request Review”, “Mark as Clean”.On an acceptably low score, show: “Check passed. You may submit to Editor.”

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The screenshot shows the 'Search' step of the plagiarism checker process. At the top, there's a navigation bar with the VietNews logo, a search bar containing 'Tim kiếm tin tức...', and buttons for 'Đăng nhập' (Login) and 'Đăng ký' (Register). Below the navigation is a horizontal menu with links: Thời sự, Thế giới, Kinh doanh, Công nghệ, Thể thao, Giải trí, Sức khỏe, and Du lịch.

The main content area has a title 'Kiểm tra đạo văn' (Plagiarism check) with a circular icon. Below it, a sub-section title 'Chọn nội dung kiểm tra' (Select content to check) is shown with a small icon. A note says 'Chọn bài viết đã lưu hoặc dán nội dung mới để kiểm tra đạo văn' (Select saved article or paste new content to check for plagiarism).

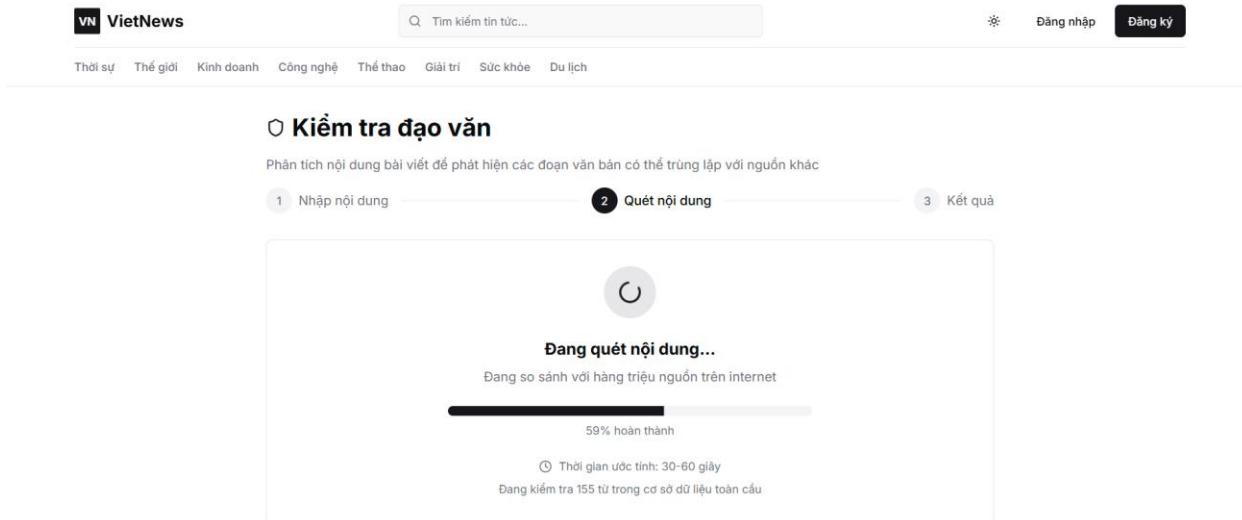
The interface is divided into two main sections: 'Chọn bài viết đã lưu' (Selected articles) and 'Dán nội dung mới' (Paste new content). In the 'Chosen articles' section, there's a dropdown menu showing 'Công nghệ AI đang thay đổi cách chúng ta làm việc trong năm 2024' (Artificial intelligence is changing the way we work in 2024) with '156 từ • 2024-01-15'. Below this is a 'HOẶC' (Or) button. In the 'Paste new content' section, there's a text area with placeholder text 'Dán nội dung bài viết cần kiểm tra đạo văn...' (Paste the article you want to check for plagiarism...).

At the bottom of the form, there are two status indicators: '155 từ • Độ dài phù hợp' (155 words • Appropriate length) on the left and 'Tối thiểu: 50 từ • Tối đa: 20,000 từ' (Minimum: 50 words • Maximum: 20,000 words) on the right. A large black button at the bottom right says 'Bắt đầu kiểm tra đạo văn' (Start plagiarism check).

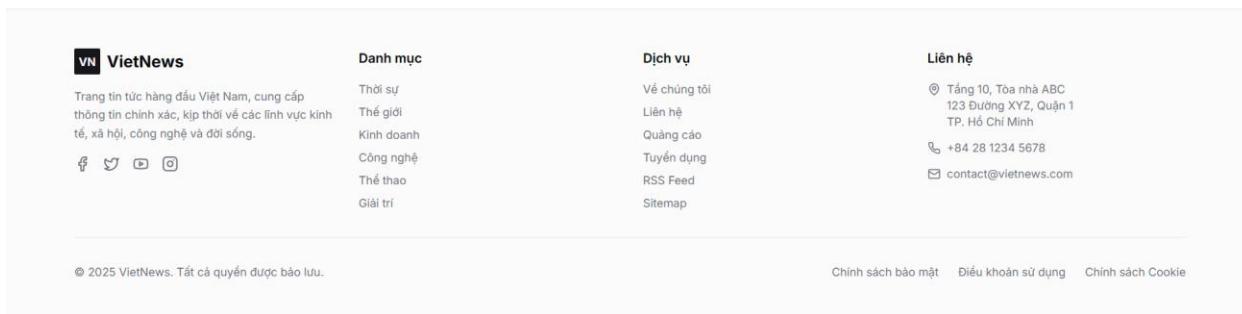
Below the search form, there's a footer with the VietNews logo, social media icons (Facebook, Twitter, YouTube, Instagram), and a link to the homepage. The footer is divided into four sections: 'Danh mục' (Categories), 'Dịch vụ' (Services), and 'Liên hệ' (Contact). The 'Danh mục' section lists: Thời sự, Thế giới, Kinh doanh, Công nghệ, Thể thao, Giải trí. The 'Dịch vụ' section lists: Về chúng tôi, Liên hệ, Quảng cáo, Tuyển dụng, RSS Feed, Sitemap. The 'Liên hệ' section lists: Địa chỉ (Tầng 10, Tòa nhà ABC, 123 Đường XYZ, Quận 1, TP. Hồ Chí Minh), Hotline (+84 28 1234 5678), and Email (contact@vietnews.com).

At the very bottom of the page, there are links to 'Chính sách bảo mật' (Privacy Policy), 'Điều khoản sử dụng' (Terms of Use), and 'Chính sách Cookie' (Cookie Policy).

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The screenshot shows the 'Quét nội dung...' (Scan content) step of a three-step process. A progress bar indicates 59% completion. The status message says 'Đang so sánh với hàng triệu nguồn trên internet' (Comparing with millions of sources on the internet). Below it, it says 'Đang kiểm tra 155 từ trong cơ sở dữ liệu toàn cầu' (Checking 155 words in the global database).



The footer includes links to social media (Facebook, Twitter, YouTube, Instagram), categories like Thời sự, Kinh doanh, Công nghệ, Thể thao, Giải trí, Sức khỏe, Du lịch, and services like Vé chung tôi, Liên hệ, Quảng cáo, Tuyển dụng, RSS Feed, and Sitemap. It also lists contact information: Tầng 10, Tòa nhà ABC, 123 Đường XYZ, Quận 1, TP. Hồ Chí Minh; phone +84 28 1234 5678; email contact@vietnews.com.

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VN VietNews

Tìm kiếm tin tức...

Đăng nhập Đăng ký

Thời sự Thế giới Kinh doanh Công nghệ Thể thao Giải trí Sức khỏe Du lịch

Kiểm tra đạo văn

Phân tích nội dung bài viết để phát hiện các đoạn văn bản có thể trùng lặp với nguồn khác

1 Nhập nội dung 2 Quét nội dung 3 Kết quả

Tỷ lệ tương đồng
32% Nguy hiểm

Nguồn phát hiện
3 Nguồn có nội dung tương đồng

Đánh giá
Không được phép
Cần chỉnh sửa trước khi gửi

Nội dung được phân tích
Các đoạn văn bản được tóm tắt để thấy mức độ tương đồng với các nguồn khác

Nguy hiểm ($\geq 25\%$) Cảnh báo (15-24%) An toàn (<15%)

Trí tuệ nhân tạo (AI) đã không còn là một khái niệm xa vời mà đã trở thành một phần không thể thiếu trong cuộc sống và công việc hàng ngày của chúng ta. Năm 2024 đánh dấu một bước ngoặt quan trọng trong việc ứng dụng AI vào các lĩnh vực khác nhau. Theo nghiên cứu mới nhất từ McKinsey Global Institute, **"AI có thể tự động hóa khoảng 30% các công việc hiện tại vào năm 2030"**. Tuy nhiên, điều này không có nghĩa là sẽ có 30% lao động bị thất nghiệp, mà thay vào đó, bản chất công việc sẽ thay đổi. Các công việc đòi hỏi tư duy sáng tạo, giải quyết vấn đề phức tạp và tương tác con người sẽ trở nên quan trọng hơn bao giờ hết. Trong khi đó, **các tác vụ lặp đi lặp lại, có thể dự đoán được sẽ được AI đảm nhận**.

Chi tiết nguồn tương đồng

McKinsey Global Institute Report 2024 Nguy hiểm
"AI có thể tự động hóa khoảng 30% các công việc hiện tại vào năm 2030"
Độ tin cậy: 95% Xem nguồn

TechCrunch - AI in Daily Life Cảnh báo
"Trí tuệ nhân tạo đã trở thành một phần không thể thiếu"
Độ tin cậy: 78% Xem nguồn

Harvard Business Review An toàn
"các tác vụ lặp đi lặp lại, có thể dự đoán được sẽ được AI đảm nhận"
Độ tin cậy: 65% Xem nguồn

Không thể gửi bài viết! Tỷ lệ tương đồng quá cao. Vui lòng chỉnh sửa nội dung trước khi gửi duyệt.

Chỉnh sửa bài viết Yêu cầu xem xét Kiểm tra bài khác

VN VietNews

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Thời sự Thế giới Kinh doanh Công nghệ Thể thao Giải trí

Liên hệ Quảng cáo Tuyển dụng RSS Feed Sitemap

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Chính sách bảo mật Điều khoản sử dụng Chính sách Cookie

SƠ ĐỒ USE CASE

