Digital Newspaper Website Use-Case Specification: Log Out

Version 1.0

Revision History

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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).

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).

- 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.

- 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.)."

