nagAI: Use Cases

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Case 1 : Navigate to Page via Navbar	
Primary Actor	Logged-in user
Preconditions	User is authenticated and any page is loaded.
Flow of Events	1. User clicks a page name in the navigation bar. 2. System routes to the selected page.
Postconditions	Selected page is displayed; corresponding link is highlighted.

Case 2: Return to Main Page via Logo	
Primary Actor	Logged-in user
Preconditions	1. User is authenticated and any page is loaded. 2. The nagAI logo is visible.
Flow of Events	1. User clicks on the “nagAI” logo (top-left). 2. System routes to the Main Page.
Postconditions	Main Page is displayed.

Case 3: Open My Account Modal	
Primary Actor	Logged-in user
Preconditions	Customer is searching for books, and is considering purchasing them.
Flow of Events	1. User clicks on the name button. 2. System opens the My Account modal over the current view.
Postconditions	My Account modal is active.

Case 4: Create Account with Google	
Primary Actor	New visitor
Preconditions	Create Account / Log In page loaded.
Flow of Events	1. User clicks on the “Continue with Google” button. 2. System opens Google OAuth popup. 3. User enters their Google credentials to sign up to nagAI. 4. OAuth returns a google_id not in the database. 5. System creates a user record (google_id, full_name, timestamps) and stores it. 6. System logs user in and displays Terms & Conditions page. 7. Postconditions: New account exists; user is in post-signup flow.
Postconditions	New account exists; user is in post-signup flow.

Case 5: Log In with Google (Existing Account)	
Primary Actor	Returning user
Preconditions	google_id already stored.
Flow of Events	1. User clicks on the “Continue with Google” button. 2. System opens Google OAuth popup. 3. User enters their Google credentials to sign in to nagAI. 4. google_id found; system updates last_login and routes to Main Page.
Postconditions	User is authenticated and is on Main Page.

Case 6: Accept Terms & Privacy (First Login)	
Primary Actor	Newly created user
Preconditions	Post-signup Terms page displayed; checkboxes unchecked.
Flow of Events	1. User checks both “Terms & Conditions” and “Privacy Statement.” 2. “Continue” button activates. 3. User clicks “Continue.” 4. System proceeds to Name Confirmation page. Alternate Flow: User clicks “Cancel” → system returns to Login page.
Postconditions	User has agreed to policies.

Case 7: Edit Display Name after Signup	
Primary Actor	New user
Preconditions	Name Confirmation page displayed.
Flow of Events	1. System shows full_name from Google in editable text field (≤ 30 chars). 2. User optionally edits name. 3. User clicks “Continue.” 4. System saves name and shows Gesture Help overlay.
Postconditions	Name stored; user enters Main Page with overlay.

Case 8: Handle Google OAuth Failure	
Primary Actor	Any visitor
Preconditions	OAuth attempt in progress.
Flow of Events	1. OAuth returns error. 2. System displays red error “Failed to authenticate with Google.” 3. System returns to Login page.
Postconditions	User remains unauthenticated.

Case 9: Display Webcam Feed	
Primary Actor	Logged-in user
Preconditions	Main Page loaded; webcam permission granted.
Flow of Events	1. System renders 16:9 webcam box.
Postconditions	Live webcam feed visible to user.

Case 10: Run Focus Session Timer	
Primary Actor	User on Main Page
Preconditions	Timer idle.
Flow of Events	1. System starts focus countdown at 25:00; circular border shrinks. 2. Border color is red (#EB6565). 3. When timer hits 0, system switches to break session (UC-11).
Postconditions	Focus session data recorded.

Case 11: Run Break Session Timer	
Primary Actor	User on Main Page
Preconditions	Focus session ended.
Flow of Events	1. System starts break countdown at 5:00 with blue border (#65B3EB). 2. At 0, system begins next focus session.
Postconditions	Break recorded; cycle continues.

Case 12: Detect Distraction Event	
Primary Actor	System (AI API)
Preconditions	Focus session active; distraction level computation available.
Flow of Events	1. System evaluates distraction level. 2. If flagged behaviors persist beyond thresholds, mark event. 3. System increments distraction counter on button. 4. System logs event data (timestamp, description, snapshot).
Postconditions	Distraction entry saved; UI counter updated.

Case 13: View Distraction Log Modal	
Primary Actor	User on Main Page
Preconditions	At least one distraction event logged.
Flow of Events	1. User clicks on the “Distractions” button. 2. System opens modal showing table sorted newest first.
Postconditions	User can inspect log.

Case 14: Toggle Distraction Log Order	
Primary Actor	User in Distraction Log modal
Preconditions	Log modal displayed.
Flow of Events	1. User activates “switch order” control. 2. System reverses sort (oldest first).
Postconditions	Table order inverted.

Case 15: View Distraction Event Details	
Primary Actor	User in Distraction Log modal
Preconditions	Log entries present.
Flow of Events	1. User clicks on a row. 2. System shows snapshot, timestamp, description, score in same modal. 3. User clicks “X” to return to table.
Postconditions	User returns to log list.

Case 16: Close Distraction Log Modal	
Primary Actor	User
Preconditions	Log modal or detail view visible.
Flow of Events	1. User clicks on top-right “X.” 2. System closes modal and returns to Main Page.
Postconditions	Modal closed.

Case 17: Track Daily Focus Time	
Primary Actor	System
Preconditions	User has completed at least one focus session.
Flow of Events	1. System accumulates focus seconds for current day. 2. At midnight, display resets to 00:00 unless session spans midnight; in that case reset after session ends.
Postconditions	Focus Time box shows up-to-date total.

Case 18: View Monthly Focus Calendar	
Primary Actor	User
Preconditions	Focus Time box visible.
Flow of Events	1. User clicks on Focus Time button. 2. System opens calendar modal with month summary. 3. User selects different month if desired.
Postconditions	Calendar data presented.

Case 19: Edit Display Name in My Account	
Primary Actor	Logged-in user
Preconditions	My Account modal open.
Flow of Events	1. User modifies full-name field (≤ 30 chars). 2. User clicks “Continue.” 3. System saves change; closes modal; routes to Main Page. Alternate Flow: Save fails → system shows red “Failed to save changes.”
Postconditions	Name updated (or error shown).

Case 20: Cancel Changes in My Account	
Primary Actor	Logged-in user
Preconditions	My Account modal open.
Flow of Events	1. User clicks “Cancel 2. System discards edits and navigates to Main Page.
Postconditions	Original data preserved.

Case 21: Sign Out	
Primary Actor	Logged-in user
Preconditions	My Account modal open.
Flow of Events	1. User clicks “Sign Out.” 2. System terminates session tokens. 3. System routes to Create Account / Log In page.
Postconditions	User logged out.

Case 22: Persist User Data in Backend	
Primary Actor	System
Preconditions	Any operation requiring storage (account, sessions, logs).
Flow of Events	1. Frontend validates input. 2. Backend API encrypts sensitive fields and executes SQL on PostgreSQL. 3. On success, backend returns confirmation to frontend.
Postconditions	Data safely stored; client updated.

Case 23: Render Responsive UI	
Primary Actor	System (frontend)
Preconditions	Any page load.
Flow of Events	1. React components (TypeScript) render with adaptive widths, centered elements, clear buttons and inputs. 2. Styles remain usable on mobile viewports.
Postconditions	Usable, visually consistent interface.

Case 24: Handle Concurrent Requests	
Primary Actor	System (backend)
Preconditions	Multiple API calls from clients.
Flow of Events	1. FastAPI handles requests asynchronously (async/await). 2. Database operations occur without race conditions.
Postconditions	Responses served within acceptable performance limits.