nagAI: Project Milestones 1-4
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1. Individual Progress Update: Wooyoung Jung
   a. Milestone 1:
       i. Scaled mobile UI to fit all elements in viewport.
       ii. Created main page and adjusted element margins.
       iii. Debug webcam div becomes tiny after pressing the 'Save' button in MyPage.
       iv. HelpMessage (image & text).
       v. Scale mobile UI to fit all elements in viewport.
   b. Milestone 2:
       i. Researched and Discussed AI API & backend solutions.
       ii. Refine scaling of the frontend.
       iii. Implement actual timer logic.
       iv. Debug Timer state transition bug.
       v. Implemented motion detection for triggering Gemini API calls.
   c. Milestone 3:
       i. Debug motion detection for triggering Gemini API calls (resolved inaccurate hand gesture recognition)
       ii. Send snapshots at several intervals (5s, 10s, 15s, 20s, dynamic) and test effectiveness.
       iii. Debug timer circle not resetting when stopped with hand gesture.
       iv. Pause behaviorDetection while DistractionModal is displayed.
   d. Milestone 4:
       i. Integrated Alembic for DB table migration.
       ii. Debugged module errors during DB setup.
       iii. Created & tested schemas and routes for each table.
       iv. Discussed backend deployment options: Render, Railway, Fly.io.
       v. Debugged Terms & Condition page and AccountCreation page of redirection logic after signing in with Google.
       vi. Created APIs to CRUD session & distractions data and display on frontend.
       vii. Debug URL error in frontend: append "https://" to await fetch(<URL>).
       viii. Incorrect schemas -> backend validation error -> HTTP 500 & CORS error
       ix. Debug WebcamFeed videoRef returns null -> webcam feed not

showing -> solved by waiting for
videoRef.current.onLoadedMetadata().

        x.   API auth pattern mismatch: Bearer ... in request header vs.
access_token in request body

  e. Task In-Progress:

        i.   Complete FocusLog & DistractionLog

2. Individual Progress Update: Joohyoung Jun

  a. Milestone 1:

        i.   Create Terms & Condition page and added element animation.

        ii.   Implemented element animation in Terms & Condition page,
Login page, AccountCreation page, and MyPage.

        iii.   Implemented 'Agree All' button in Terms & Condition page.

        iv.   Enabled a webcam streaming feature in MainPage.

        v.   Implemented motion animation when navigating to other pages.

  b. Milestone 2:

        i.   Researched and Discussed AI API & backend solutions.

        ii.   Refine scaling of the frontend.

        iii.   Username gets reset to 'Guest' after navigating to different pages
(modified in localStorage).

        iv.   Debug Terms & Conditions page, and CreateAccountpage:
animation and scaling.

        v.   Fixed webcam size in Mainpage.

  c. Milestone 3:

        i.   Set up FastAPI-Uvicorn and PostgreSQL DB.

        ii.   Debug timer circle not resetting when stopped with hand gesture.

        iii.   Established a connection to the Supabase server in an IPv6
environment using the transaction pooler URL.

  d. MIlestone 4:

        i.   Integrated and tested Secrets tables & routes

        ii.   Implemented logic to cycle between multiple Gemini API keys to
overcome daily request limits

        iii.   Discussed backend deployment options: Render, Railway, Fly.io.

        iv.   Implemented Sign-out logic.

        v.   Fixed a bug in the navbar username button that would display
"Guest" after signing out and signing in again (modified in
backend).

        vi.   Wrote a render.yaml file.

vii. Connected API and FocusLog to get total focus time of the day and display it in FocusLog calendar view.

e. Task In-Progress:
   i. Webcam full-screen mode and hide timer(low priority).
   ii. Potential improvement: automatic/manual camera adjustment (exposure, highlights, brightness, contrast, etc) to filter bright lighting
   iii. Blink GestureHelpButton if user inactivity >= 15 seconds.
   iv. Refine Focus Log UI.

3. Individual Progress Update: Jiwoo Kim
   a. Milestone 1:
      i. Created Focus Time & Distraction button
      ii. Created Focus Log with actual calendar
      iii. Focus Log: show the time & focus cycle in the calendar
      iv. Created Distraction Log with table
      v. Distraction Log: create pagination
      vi. Created my page with essential functions
      vii. Implemented to press ESC to close Logs
   b. Milestone 2:
      i. Researched and Discussed AI API & backend solutions.
      ii. Refine scaling of the frontend.
      iii. Focus Log: enable users to move to different months by clicking left and right key
      iv. Enable the users to update the user name in the top-right button when saving the name without reloading the page
   c. Milestone 3:
      i. Setup Google OAuth 2.0 API
         1. Generate API Key
         2. Create supabaseClient in backend
   d. Milestone 4:
      i. Setup Google OAuth 2.0 API
         1. Integrate into frontend
      ii. Integrated and tested Secrets table & routes
      iii. Created APIs to route Gemini outputs to Distractions table and display data in FocusLog and DistractionLog
      iv. Discussed backend deployment options: Render, Railway, Fly.io.
      v. Changed Distractions table

vi.   Fixed the bug regarding jwt file

vii.   Received the Distraction data from the backend and display it in Distraction Log.

viii. Created Distraction Detailed Log

ix.   Enabled User to see their distraction information from the distraction log

x.   Enabled User to see their distraction information with the snapshot image from Distraction Detailed Log

xi.   Updated the count of distractions in the distraction button from the main page

xii.   Enable pagination in Distraction Log

xiii. README update

e. Task In-Progress:

i.   Distraction Log frontend update

4. Group Progress Update:

a. Overall Status:

We believe our progress is on track.

Most of the planned features, including AI-triggered distraction logging, focus tracking, Supabase integration, and OAuth login, are implemented and working across both backend and frontend.

b. Grade (Self-evaluation):

We would assign ourselves a grade of A–.

We've completed almost all planned functionality and made extra improvements like dynamic Gemini API key cycling and UI polishing. However, some low-priority frontend improvements remain in progress (e.g., webcam fullscreen and distraction log UI refinement).

c. Planned vs. Actual Completion Summary:

Feature	Planned Completion	Status
Google OAuth Login	Milestone 3	Completed
Supabase Integration	Milestone 3	Completed
Focus/Distraction Logging	Milestone 3	Completed

Motion-triggered AI Snapshot	Milestone 3	Completed
Gemini Integration	Milestone 4	Completed
Backend Deployment	Milestone 4	Completed
Frontend Deployment	Milestone 4	Completed
Webcam Full-screen Mode	Final	Completed
DistractionLog and FocusLog UI Update	Final	Completed

5. Deployment Information:
   a. Frontend: Vercel
   b. API Server: Render
   c. Database: Supabase
   d. OAuth provider: Google (via Supabase)
   e. Deployment URL: https://nagai-pi.vercel.app