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Note – Final Project Report

1. Project Overview

Note is a mobile-first, collaborative workspace application created to solve a widespread issue: students and remote teams are constantly switching between separate tools—note-taking platforms, and task managers—to stay productive.

This fragmentation causes confusion, wasted time, and lost context. Note offers a unified, intuitive space where users can take notes, assign tasks, and collaborate—all in one place.

Inspired by the familiarity of physical notebooks, Note adopts a notebook-paper aesthetic. This visual style not only stands out from competitors but supports cognitive ease and emotional comfort. Combined with structured digital features

such as **role-based permissions**, **template libraries**, and **actionable checklists**, Note is more than a notes app—it's a complete collaborative ecosystem.

This report outlines the end-to-end process: from identifying user pain points, to research, ideation, prototyping, usability testing, design rationale, HCI applications, and final iteration.

2. Team Roles & Responsibilities

Our research shows that **students and remote teams** often struggle to organize shared work and documents. They want simple tools that combine notes, tasks, and team collaboration in one place.

We used **surveys and interviews** to learn about user needs. Most users prefer a clean design, mobile access, and the ability to assign roles.

Tara Gharati – UX Designer & Research Lead

- Led user research and persona development
- Drafted initial sketches and wireframes
- Defined usability goals and oversaw testing

Justin Timberlake – Interaction Designer

• Built interactive behaviors (template preview, editor tools)

• Focused on microinteractions and flow dynamics

John Doe – UI & Content Designer

- Structured editor UI and visual hierarchy
- Developed layout for the sidebar and page views

Bruce Wayne, Kanye West, Peter Parker – Testers & Advisors

- Conducted peer reviews and exploratory testing
- Provided real-time feedback during iterative cycles

All collaboration occurred via **Figma**, using version control, shared team folders, and comment-based feedback cycles.

3. Problem Statement

Through initial user interviews and experience mapping, we identified several pain points with current productivity ecosystems:

- Students juggling Google Docs, Slack, and Trello found the multi-app context-switching overwhelming.
- Task ownership was unclear without structured roles.
- Most digital tools lacked emotional warmth or familiarity.

Goals

- Centralize collaboration: one tool for notes, agendas, and planning.
- Mimic physical notebooks to boost focus and reduce cognitive load.
- Include task structure and access controls (Admin, Editor, Viewer).

4. Design Decisions & Innovations

Notebook-Style Editor

We applied the *aesthetic-usability effect*—a principle in HCI where users perceive visually pleasing designs as easier to use. The notebook-paper theme softens the digital interface, reduces intimidation, and helps users stay immersed.

Role-Based Access

To reduce confusion in group settings, we implemented three roles:

- Admin Full permissions, including deletion and role assignment
- Editor Can modify content but not settings
- Viewer Read-only access

This follows the principle of **error prevention** and **visibility of system status** by showing role icons and access boundaries clearly.

Pre-Made Templates

Templates for project plans, meeting notes, and task lists help reduce the *cognitive effort* required to start from scratch. It supports **recognition over recall**, a key HCI guideline.

5. User Research & Personas

Methods Used:

- Online surveys
- One-on-one semi-structured interviews
- Contextual inquiries via screen sharing

Findings:

- 83% used 3+ apps for group work
- 75% wanted permission-based controls
- 65% felt overwhelmed by unstructured workflows

Personas:

- 1. Tara (Student Leader) Organizes study groups, needs task delegation
- 2. **Justin (Collaborator)** Contributes but doesn't want to manage
- 3. Clark (Visual Learner) Struggles with dry interfaces, prefers guided layouts

These personas informed the feature prioritization and UI decisions.

6. Design Process

Sketching & Ideation

Initial low-fidelity sketches were drawn on paper and digitized in Figma. Key flows included:

- Login & Auth
- Sidebar Navigation
- Editor Layout (Notes, Agenda, Action Items)
- Role Assignment Interface
- Template Browser

We conducted **heuristic evaluations** early using Nielsen's principles to identify usability risks.

Wireframes & User Flows

- Prioritized clear signposting using consistency and standards (sidebar iconography)
- Applied **progressive disclosure** in settings and template actions
- Used affordances (checkboxes, toggles) for interactive elements

Color & Typography

- Chose a light paper-beige background for comfort
- Used a legible serif font for the editor to mimic handwriting
- Ensured contrast ratios met WCAG AA standards

7. Interface Walkthrough

Page Settings

Control access via link sharing, visibility toggles, and role dropdowns. Designed using **minimalist design** principles for non-technical users.

User Profile

Users manage preferences, including profile picture, email, password, and notification settings. Save/Cancel buttons are aligned to reduce accidental data loss.

Workspace Dashboard

Acts as a landing zone after login. Folders are sortable, searchable, and color-coded—supporting the **recognition**principle.

Notebook-Style Editor

Main canvas split into Notes, Agenda, and Action Items. Checkbox and bullet icons help organize thoughts. The notebook-paper aesthetic reduces digital friction.

Team Collaboration

Invite teammates, assign roles. Role tags are color-coded and persistent in the UI.

HCI principle: visibility of system status.

Template Library

Clicking a template previews the structure. One-click "Use" action inserts content.

Templates minimize startup time, especially for new users.

8. High-Fidelity Prototype

Built in Figma with:

- Responsive layout using auto-layouts
- Component-based styles (buttons, modals, nav)
- Interactive prototype with transitions, hover states, and modal flows

Mobile-First Execution:

Prioritized readability and tap targets on small screens. Navigation is sticky and collapsible to maximize usable space.

9. Usability Testing & Challenges

Participants:

- 4 users matching personas
- Tasks: create a page, assign roles, use a template, toggle dark mode

Key Feedback:

- "Notebook style makes it feel like I'm actually studying."
- "Roles made it easy to trust others wouldn't mess up my notes."
- "Add a way to toggle dark mode—it's too bright at night."

Challenges & Resolutions:

• Issue: Font contrast was too subtle on notebook background

Fix: Increased font weight, reduced transparency

• Issue: "Create Page" button was hidden on mobile

Fix: Added floating action button

• Issue: Users didn't know if they were an Admin

Fix: Role now displays persistently in the sidebar

10. Human-Computer Interaction (HCI) Principles

Applied

Principle

Example

Visibility of system status

Live role display, template previews

Principle

Example

Match between system and real	Notebook paper design, folder
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world structure

User control and freedom Undo options, Save/Cancel buttons

Consistency and standards

Universal icons, role behaviors

Error prevention Role restrictions and tooltips

Recognition over recall Template previews, sidebar labels

Flexibility and efficiency Keyboard shortcuts (future roadmap)

11. Future Work

Planned Enhancements:

- Calendar and due date integration
- Built-in chat for real-time collaboration
- Syncing with Google Drive or Microsoft 365
- AI-generated templates based on meeting notes

12. Conclusion

Note successfully blends analog comfort with digital functionality. By following HCI principles, grounding our work in real user needs, and iterating based on feedback, we've created a tool that simplifies group collaboration and supports student productivity. While it began as a design project, the outcome has real-world potential.

If developed into a full product, Note could reshape how academic and remote teams work together, reducing friction and fostering clarity.