Project Description

ThinkPal is an AI assisted web app for studying. It is created by Acuna, Boncilao and Del Mundo of team cog with the idea of helping students enhance their study experience through ThinkPal. The web app is intended to help with a student's studying, by giving them an option to skip the long reading and go straight to the key points as well as test their knowledge with a short quiz.

Requirements summary:

MINIMUM REQUIREMENTS	Processor	Intel Pentium Dual-Core (e.g., G2020) or AMD A4 (2012+)
	OS	Windows 7 SP1 / macOS 10.10 Yosemite / Android 6 / iOS 1
	RAM	2 GB
RECOMMENDED REQUIREMENTS	Processor	Intel Core i3 (7th gen or newer), AMD Ryzen 3, or Apple A10
	OS	Windows 10 / macOS 10.15 Catalina / Android 10 / iOS 13
	RAM	4 GB or more
OTHER REQUIREMENTS	Wifi access, computer or laptop	

Table 1. System Requirements

The web app was created with React so it should be runnable with any modern computer or laptop.

Prototype Description:

The prototype was created on Figma. Using Figma makes it easier for the team to quickly create mockups for the prototype. Figma also allows easy sharing through links.

ThinkPal Figma Link:https://www.figma.com/design/5u3XAN81tGOWJotMAe2gYd/ThinkPal-Prototype?node-id=0-1&t=eKWh71i30KniAMcG-1

User Scenario:

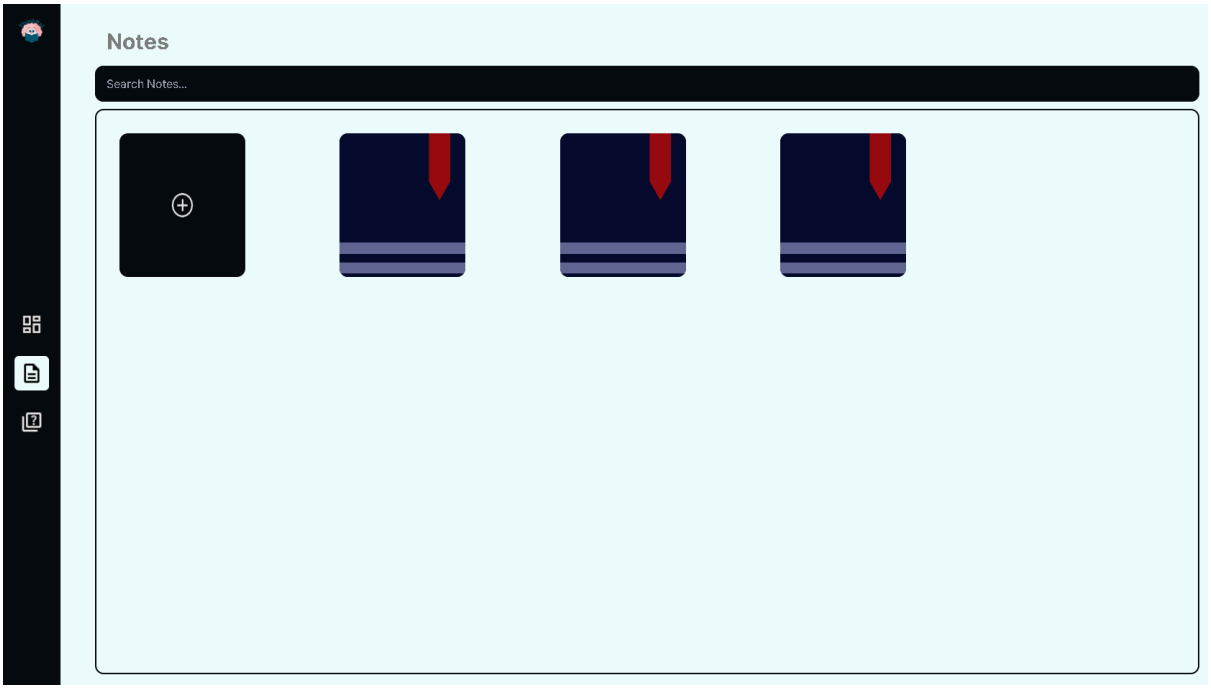
San is a student studying for their upcoming exams. She usually studies the notes she encoded into her laptop. She has studied several subjects and is becoming burnt out by the amount so for the last subject she decides to use ThinkPal. Through the app she was able to speed up the understanding process since she can just go straight to the key points and ignore all the fluff.

ThinkPal Mockup/Prototype

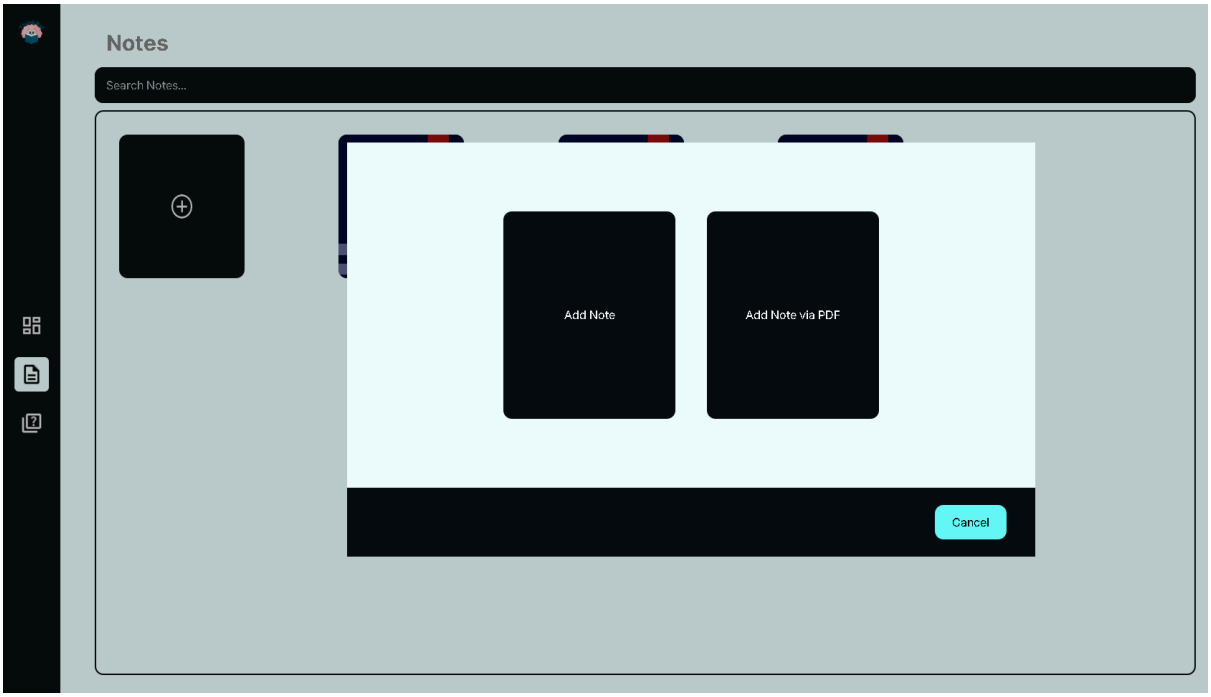
Dashboard - the dashboard contains shortcuts for the adding notes and quiz list.
Notes List - the notes list contains all the notes created by the user there is a button there that directs them to note creation options.
Add Note Options - the chooser can choose between importing a note or creating a note from scratch. Both options direct the user to the text editor.
Text editor - the text editor is shown when the user opens an existing note or makes a new one. They can generate the quiz there or reveal key points of the note.
Quiz List - the quiz list contains all the quizzes the user generated. Clicking on an item directs them to the quiz screen.
Quiz Screen - the quiz screen is where the user can test their knowledge.

Dashboard

Notes List



Add Note Options



Text Editor

Quiz List

Quiz Screen

Rationale:

The team has chosen to prototype ThinkPal with the integration of Gemini AI because of its potential to enhance note-taking through intelligent insights. The integration allows users to receive reflections or summaries right after saving a note, encouraging better understanding and retention. This feature aligns with ThinkPal's core goal: not just storing information, but supporting deeper thinking.

While the AI-powered insights provide clear value, they do have limitations. The system depends on a stable internet connection and the availability of the Gemini API. Delays in response time or external service downtime can affect the user experience.

Changes to the Requirements:

No major changes were made to the core system functionality. However, usability requirements were updated to accommodate the new AI feature. The team adjusted the interface to ensure that receiving AI insights feels natural and non-intrusive. Inspired by usability principles, key areas of focus included:

- Clear separation between user notes and AI insights
- Minimal distractions during note entry
- Timely feedback after saving

The team prioritized creating a seamless and helpful experience, especially for users who rely on the tool for organizing complex thoughts.

Usability Specifications

The prototype aims to meet the following usability metrics:

- Effectiveness: Measures how accurately users can perform core tasks like writing a note, saving it, and reviewing AI-generated insights.
- Efficiency: Evaluates how quickly and smoothly users can navigate the app and complete actions.
- Utility: Assesses whether the features—such as note-saving and AI insights—are practical and beneficial to users.
- Learnability: Determines how easily new users can understand and use ThinkPal's functions, including receiving insights.
- Memorability: Measures how well returning users can remember how to use ThinkPal after a break from using it.

User Testing Population

User testing will involve around 10 students. They will be asked to try ThinkPal's key features, including writing and saving notes, as well as reading and reflecting on the AI-generated insights. The goal is to observe how they interact with the system and identify areas for improvement.

Prototype Tasks

- Tasks are grouped based on ThinkPal's core functionalities:

Main Menu Tasks

- Launch and exit the prototype
- Navigate between main screens (e.g., Home, Notes, Insights)

Note-Taking Tasks

- Create a new note
- Save or delete a note
- Edit an existing note

AI Insight Tasks

- View AI-generated insight after saving a note
- Compare personal note content with the suggested insight
- Give feedback on AI usefulness (optional)

These tasks were selected to evaluate whether ThinkPal provides a smooth and intuitive experience, supports meaningful note-taking, and delivers useful AI feedback in real-time.

Roles

Developer / UI Designer Member	**Task(s)**
Brendan Joshua Acuna	Focused on API development and integrating AI-related features.
Allain Jave Boncilao	Handled backend endpoints and built the main backend structure.
Francis Del Mundo	Worked primarily on the frontend/UI design and implementation of the application.

Table 2. Team Member Tasks

Main Menu	Within 1 minute or below	Highly Acceptable	Successful
	Above 1 minute	Not Acceptable	Unsuccessful
Notes	Within 5 minutes or Below	Highly Acceptable	Successful
	Above 5 Minutes	Not Acceptable	Unsuccessful
Quiz	Within 5 minutes or Below	Highly Acceptable	Successful
	Above 5 minutes	Not Acceptable	Unsuccessful

Table 3. Time Interpretation

Table 3 represents the interpretation above represents how the team will be interpreting the time spent with each participant in their tasks. The table will be used as a guideline to interpret if the design of given task is successful or not at a given task.