Feasibility 1

Table of Contents

Brianna Thomas

Brianna Thomas Is an 18 year old sophomore at ODU and at TCC. Shes going for a major in computer science and a minor in data science.

After graduation she's going to work at GDIT.

Dillon Sapp

Dillon Sapp served in the U.S. Navy as a Nuclear Electrician for six years prior to separating honorably in 2019. He currently performs quality assurance testing for datacenter electrical distribution. In tandem with this work, he is Senior at ODUpursuing a degree in Computer Science. With it, he has hopes of shifting to a career in software development and to create a positive, lasting impact on the world.

Cody Donahue

Cody Donahue served in the US Navy as a Nuclear Machinist Mate. He currently lives in Colorado Springs and is a Senior and Old Dominion University pursuing his B.S in Computer Science.

After graduation, he hopes to work in backend development with government contractors.

Hannah Gill

Hannah Gill is a senior at Old Dominion University, pursuing a degree in Computer Science with a minor in Marketing. Outside of school, she works full time as a nanny for a family with two boys. She is a curious and driven learner with a strong desire to grow her programming skills.

After graduation, she hopes to work in app design and development. Hannah is especially drawn to companies whose work aligns with her core values and has a desire to make a positive impact in real, and meaningful ways.

Zemichael Gebreyohannes

Zemi Gebreyohannes is a senior studying Computer Science at Old Dominion University with an interest in data in the financial sector. He is building his programming and analytical skills to work with predictive models. After graduation, he hopes to begin a career in data science or data management.

Christian Biehn

Christian Biehn is a Computer Science student at ODU. He is originally from Germany but has been living in the United States for six years. Besides school, he works full-time as a field service technician in the DC area.

Alex Gignac

Alex Gignac is a rising senior in Computer Science at Old Dominion University and is expected to graduate in 2026. In high school, she had attended the Advanced Technology Center for their two year Software & Game Development program, where she first became familiar with programming. She has also had consistently high grades and GPA throughout primary and secondary education, graduating from Kempsville High School with highest honors.

Elevator Pitch

As AI tools like ChatGPT and Grammarly become everyday companions for students, there's a growing risk that we're letting AI do too much thinking for us, possibly weakening our critical thinking, creativity and problem-solving skills. Recent studies show that while AI can boost writing quality and save time, students who rely solely on AI actually understand less. That's why we're building a mobile/web app that encourages users to think first like reflective prompts, challenge modes, and usage tracking. Our app empowers students and teachers to harness AI's benefits while still building the independent skills that matter most for lifelong learning.

The Societal Problem

As AI tools like ChatGPT, Grammarly, and search engines become more popular, a lot of people, especially students, are starting to rely on them too much. Instead of using them for support, we're starting to see people let AI do the thinking for them. While that might seem helpful in the moment, it could cause long-term problems when it comes to developing critical thinking, creativity, and problem-solving skills.

Problem Characteristics

- According to Qirui Ju, a study conducted on a group of students found that those who fully relied on AI for their school assignments scored almost 20% lower during a writing assignment than those who don't.

- A systematic review found that excessive reliance on AI dialogue systems significantly impairs students' abilities in critical thinking, decision-making, and analytical reasoning. (Zhai et al., 2024)

- Many users rely on AI responses without checking them, often because of mental shortcuts and cognitive biases. (Vasconcelos et al., 2023)

Current Process Flow
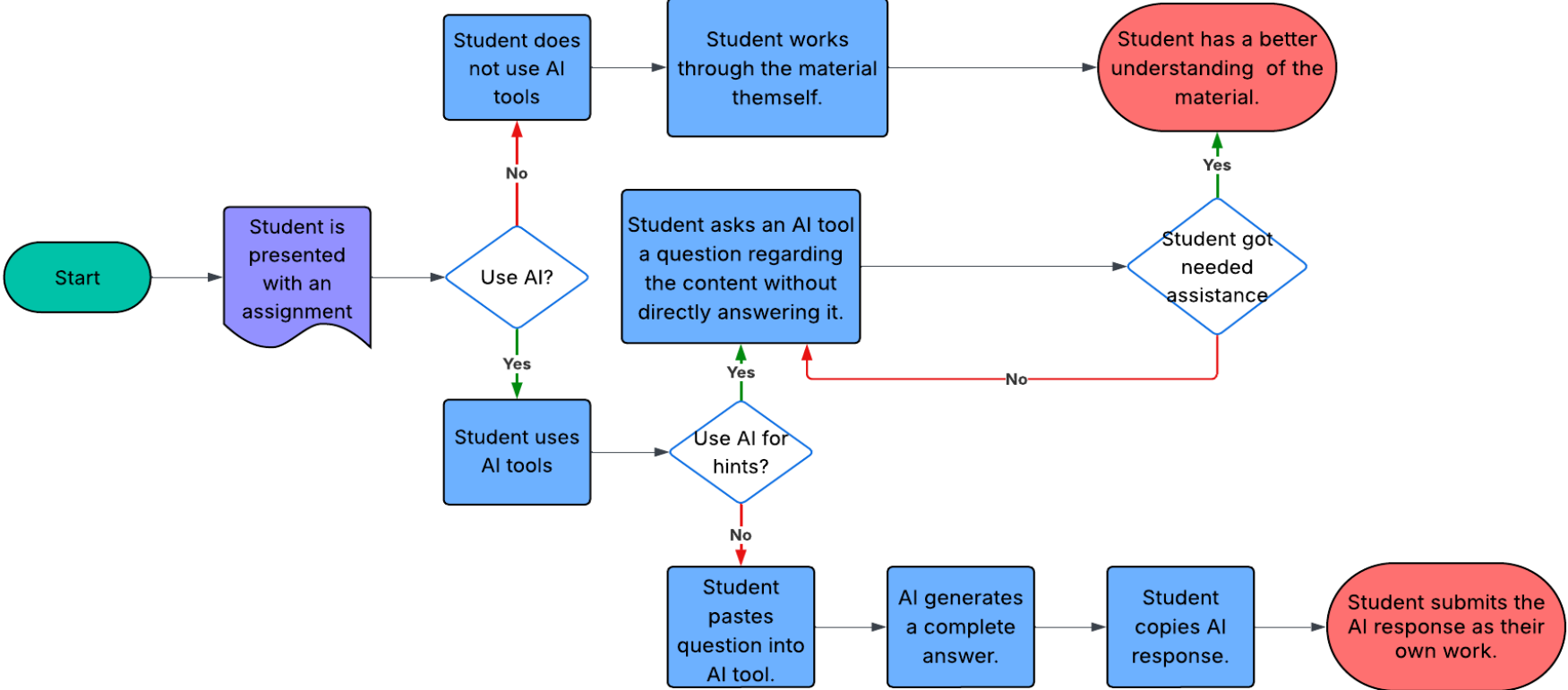
Solution Statement

Our goal is to build a mobile app and a web application that helps students and educators use AI tools more intentionally. Instead of giving answers immediately, the app will encourage users to use their own thought process first with the help of guided questions, reflective prompts, and challenge modes that limit or delay AI input. The student's LLM usage history will be accessible to the teacher. This will allow them to identify problem areas in student comprehension. The end goal is to help students learn without the machine doing all the thinking for them.

Solution Process Flow
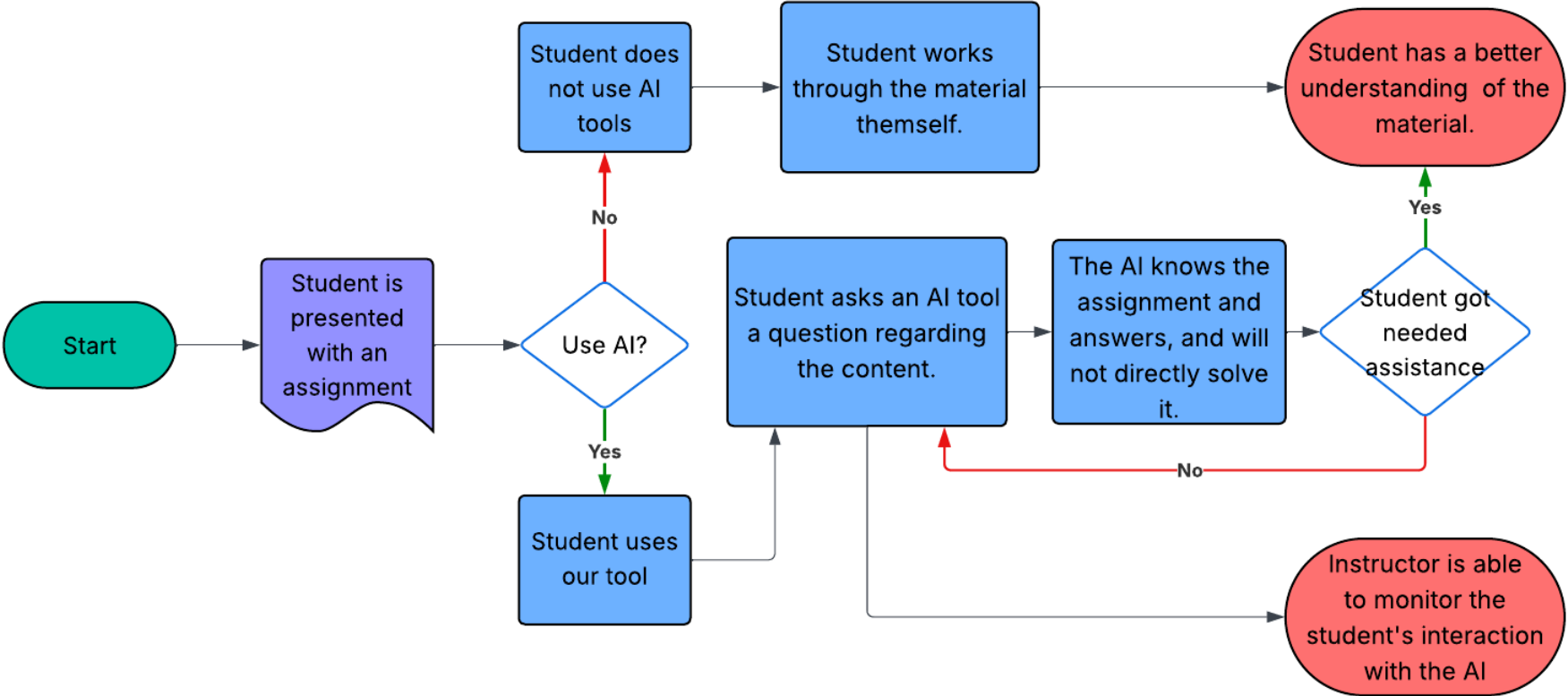
What It Will Do

- Provide instructor with the ability to upload assignments to the platform.

- Provides the student with access to a LLM while completing their assignment.

- Restricts the copy/paste function for the student.

- Guides the student's questions with leading prompts to help them arrive at the answer.

- Provides the instructor with the student's full user history.

What It Will Not Do

- Diminish the guardrails put in place by the LLM's originator.

- Provide direct answers to assignment questions.

- Replace the need for student effort and critical thinking

Competition Matrix

Function	Tempered-AI	Chegg	ChatGPT	Google's AI Overview
Explains how the solution was achieved	✓	✓	✓	
Restricts copy & paste functionality	✓			
Guides the user with leading prompts based on the desired answer	✓			
Provides external links to more information			✓	✓
Saves user history for review	✓	✓	✓	

Development Tools

Frontend-

Backend-

Database-

Ai integration-

Authentication-

Cloud Hosting-

Major Functional Components Overview

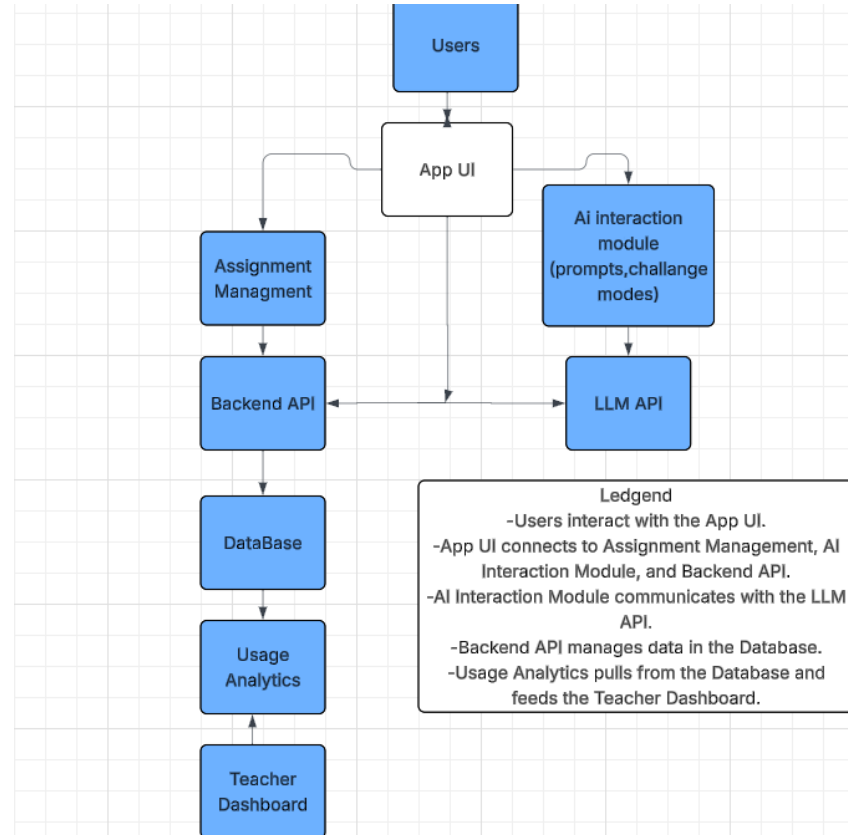User Authentication (students, teachers)

Assignment Managment (upload, assign, track)

Ai integration (prompts, challenge modes LLm access)

Copy/paste restriction layer

Admin controls

Major Functional Components Diagram

Risks Overview

Over reliance on AI: Students may still find workarounds

Privacy concerns: Tracking usage must comply with FERPA/GDPR

Technical complexity: integrating copy/paste restrictions and analytics.

User adoption: Teaches and students may resist new workflows

Real World Product vs Prototype

Prototype: limited features, basic UI, core functionality (prompts usage tracking, assignment upload)

Real world Product: Scalable, robust security, full analytics, Intergrations with LMS, polished UX/UI, mobile and web parity

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Appendix