AI Literacy App

Motivation

Artificial intelligence is no longer a futuristic concept but a pervasive part of everyday life. From navigation systems to streaming recommendations, from translation tools to conversational models like ChatGPT, AI systems are embedded in how we work, learn, and live. In professional contexts, tools such as ChatGPT or Copilot are increasingly used to draft texts, summarize information, generate ideas, or even write code. This can make work and study more efficient and reduce effort, but it also raises pressing questions.

The opportunities are clear: students and professionals can save time, focus on higher-level thinking, and explore new creative possibilities. Yet the risks are equally evident. Many users interact with AI tools uncritically, assuming their answers to be correct, neutral, or complete. Misunderstandings about how AI systems work can lead to false assumptions, over-reliance, or the neglect of one's own skills. More broadly, concerns about bias, discrimination, or job displacement are becoming part of everyday discussions in higher education and the workplace.

Universities therefore face a new responsibility: they must equip students not only with the ability to use AI tools but also with the capacity to do so in a reflective, informed, and resilient way. This is where the proposed app comes in. It is conceived as a research-driven prototype that translates these educational goals into practice. The app brings together three core functions: (1) microlearning, (2) space for reflection, and (3) gentle reminders in a compact, modular form. The idea is not to replace teaching, but to extend it into everyday life, so that students can gradually build confidence and awareness in their own AI use.

Core Modules

1. Understand: AI Literacy Quiz

The quiz module provides short microlearning units. Each session includes 3–5 questions with immediate feedback. The question pool covers three dimensions:

- Technical basics, such as the probabilistic nature of LLMs or the distinction between AI and simpler automation.
- Applications in practice, ranging from ChatGPT to Spotify recommendations, navigation, or translation apps.
- Bias and ethics, focusing on issues like discriminatory outputs, privacy concerns, or fairness in algorithmic decisions.

The idea is to give students compact, repeatable learning moments that can build knowledge over time without overloading them.

2. Manage: Reflection Journal

The journal invites students to briefly reflect on their own encounters with AI. Entries are designed to be short (one or two sentences) and open-ended so that all students (whether skeptical, concerned, or relaxed) can participate. Prompts include questions such as: “Where did I encounter AI today?”, “What task did I accomplish on my own this week?”, or “Did I notice a biased or problematic output?”

The goal is not to create lengthy diary entries but to strengthen awareness and self-efficacy. Small confirmations or symbolic badges can acknowledge participation without turning it into a gamified contest.

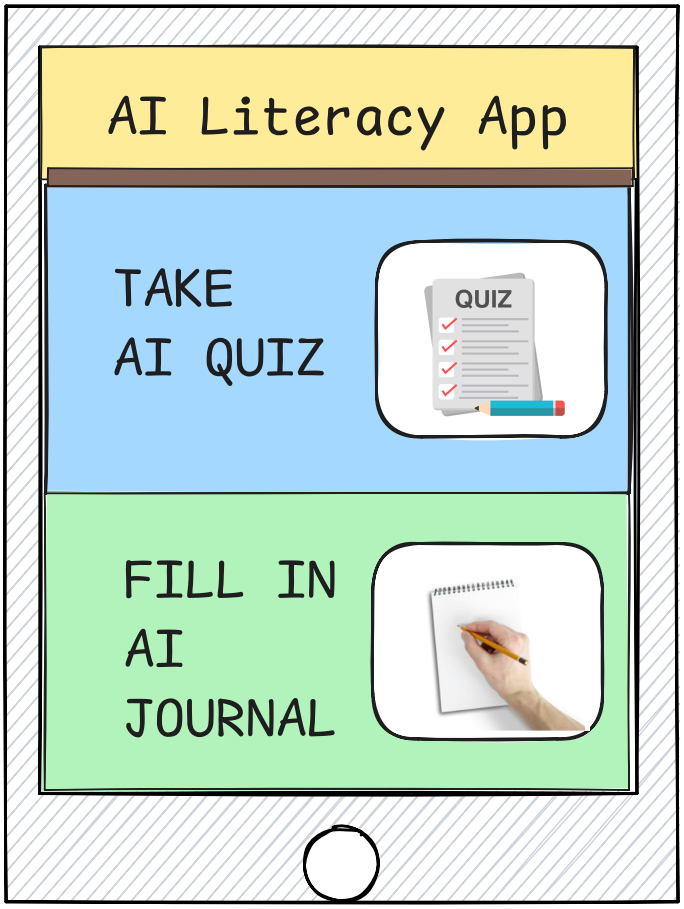

Figure: Mockup for app's main screen

3. Sustain: Nudges

Nudges are lightweight reminders sent once or twice per week. They encourage ongoing reflection without overwhelming the user. Examples include: “Have you fact-checked an AI-generated answer this week?”, “Think of one skill you strengthened independently of AI”, or “Did you notice bias in an AI recommendation?”

The nudges should feel supportive rather than moralizing, keeping the reflection alive in everyday study life.

Optional Features

The app can grow gradually beyond these three core modules. Future expansions might include short coping cards with practical tips for dealing with uncertainty, micro-reflection tasks that encourage users to compare their experiences with and without AI, visualizations of progress in quiz scores or journal entries, light gamification elements such as badges or milestones, and even a peer layer where anonymized strategies from other students are shared. These additional features would not be essential for every user but could be particularly helpful for specific groups, for example, students who experience strong anxieties about their future career prospects, who worry about job loss, or who report feeling especially dependent on AI tools.

Use Scenario

Sarah, a 21-year-old computer science student, downloads the app after a seminar on "Informatics and Society". On Monday she opens Understand and works through four quiz questions. One asks: “AI systems are always neutral. True or false?” She answers “true,” and the app immediately explains why this is false. On Wednesday she tries Manage and notes in the journal: “Google Maps suggested a new route today.” She begins to see how AI is present in her daily life. On Friday she receives a Sustain nudge: “Have you fact-checked an AI answer this week?” That evening she double-checks a translation she had taken from DeepL.

After two weeks, Sarah has answered about twenty quiz questions, written three journal entries, and reflected more consciously on her AI use. The app has taken only a few minutes of her time each week but has shifted her awareness of how AI affects both her studies and her everyday routines.