

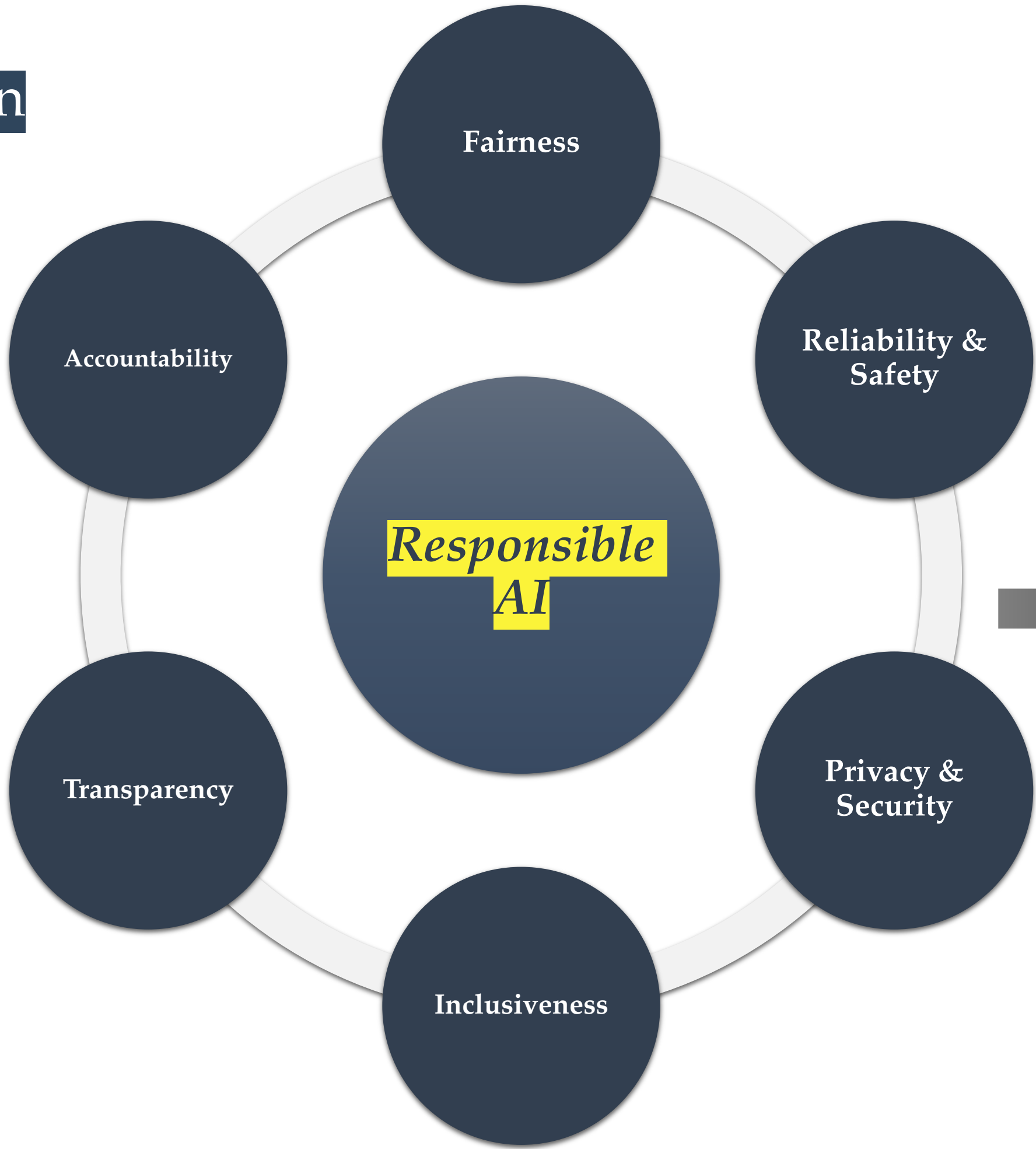


1. Course Description

This course introduces foundational knowledge and methods necessary for designing *human-centred artificial intelligence (AI) applications*, including user interface (UI) design, prototyping, user testing, and iteration. Students will learn principles and tools to create ideas for *AI-powered products* that can contribute to realising values and making an impact in the real world. This course also investigates *the fundamentals of the human experience*, examining how *responsible AI design and inclusive design principles* can be applied to create meaningful UI/UX designs, facilitate human-AI interaction, and develop human-centric AI.

Basic Framework

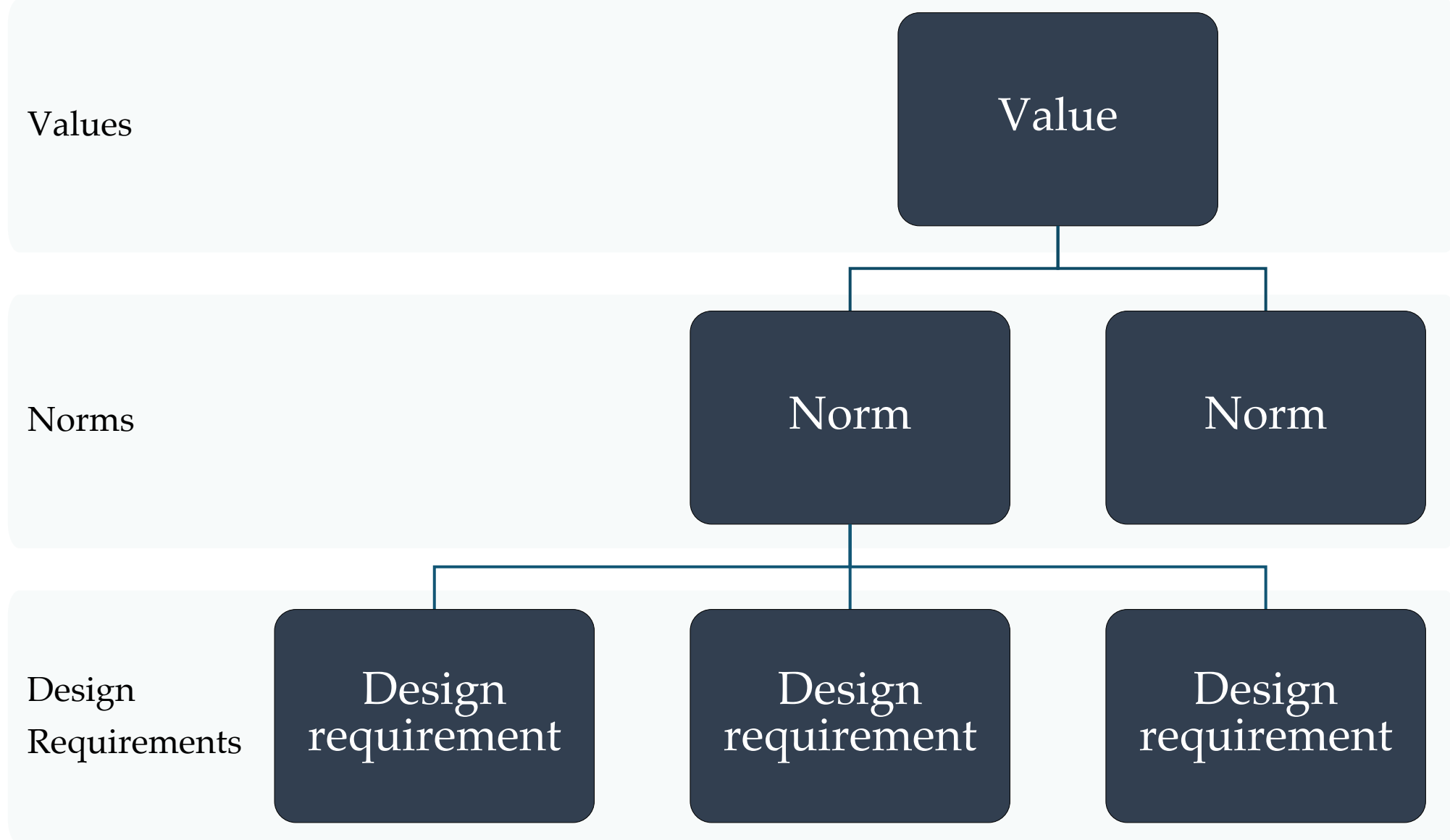
Value Sensitive Design
Activity.
Exploring
Responsible AI
Framework



Related sources:
• Google's Responsible Generative toolkit
<https://ai.google.dev/responsible>
• Google AI principles
<https://ai.google/responsibility/principles/#our-ai-principles-in-action>
• Microsoft: <https://learn.microsoft.com/en-us/azure/machine-learning/concept-responsible-ai?view=azureml-api-2>

2. Intended Learning Outcomes

- Understand the *fundamentals of human experience* and how AI technology mediates human experience in positive ways.
 - Learn **Human-AI Interaction guidelines** and Human-centred AI design methods.
 - Present and demonstrate the final digital interface that mediates **sustainability** and human well-being.
- Apply *inclusive design, responsible AI design, & value-sensitive design principles* to ideate AI solutions, prioritising human well-being and social good.
- Learn *UX research methods* and their relevant usages.
 - Conduct UX research** to explore the current status and define problems.
- Apply *UX/UI design methods* that transfer initial concepts into a storyboard, use scenarios, and design requirements.
 - Develop low-fi and hi-fi prototypes using tools such as Figma
 - Conduct user test methods on one of the prototypes.
 - Analyse the test results and apply the findings to iterate on their prototype.
- Present and demonstrate *UI/UX that mediates liveability and human well-being* in AI-powered apps.



Responsible AI Value
(e.g., Transparency)

Principle
(e.g., Provide feedback mechanisms)

Interfaces & Policies
(e.g., Feedback interface)

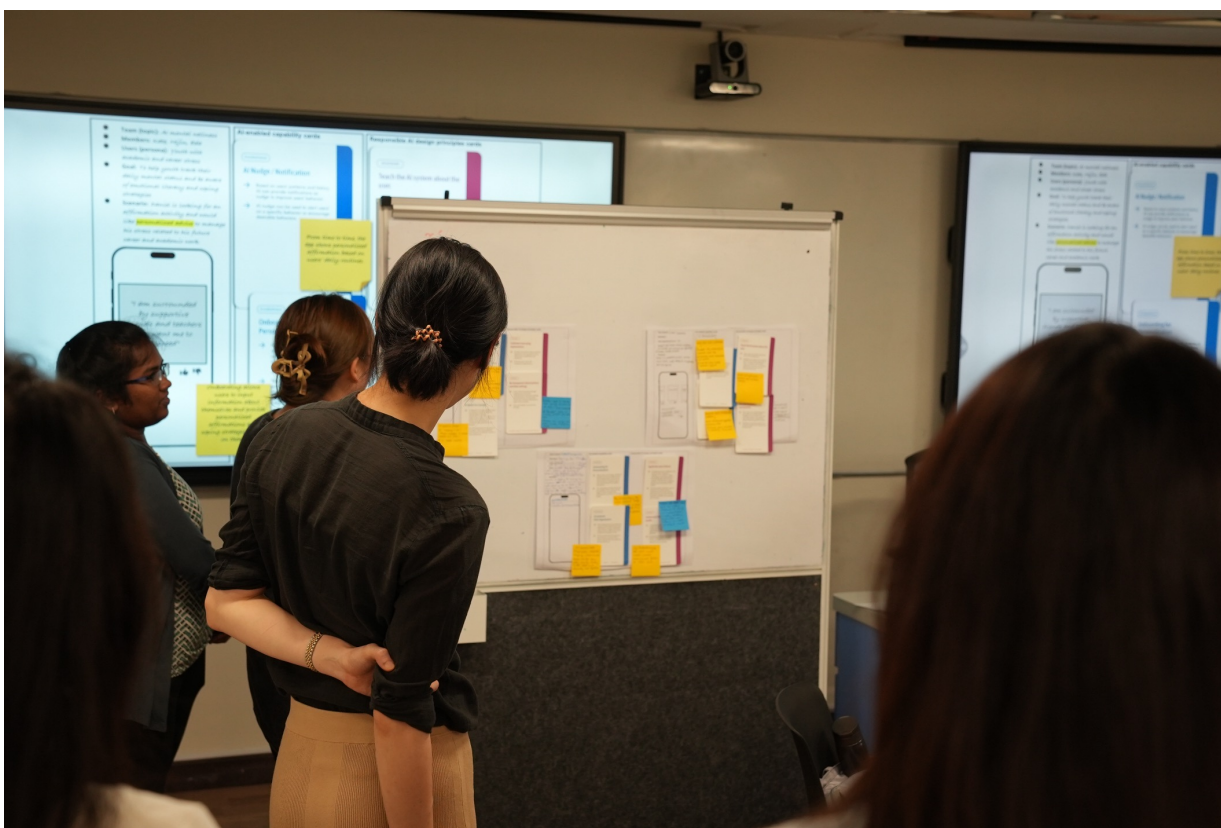
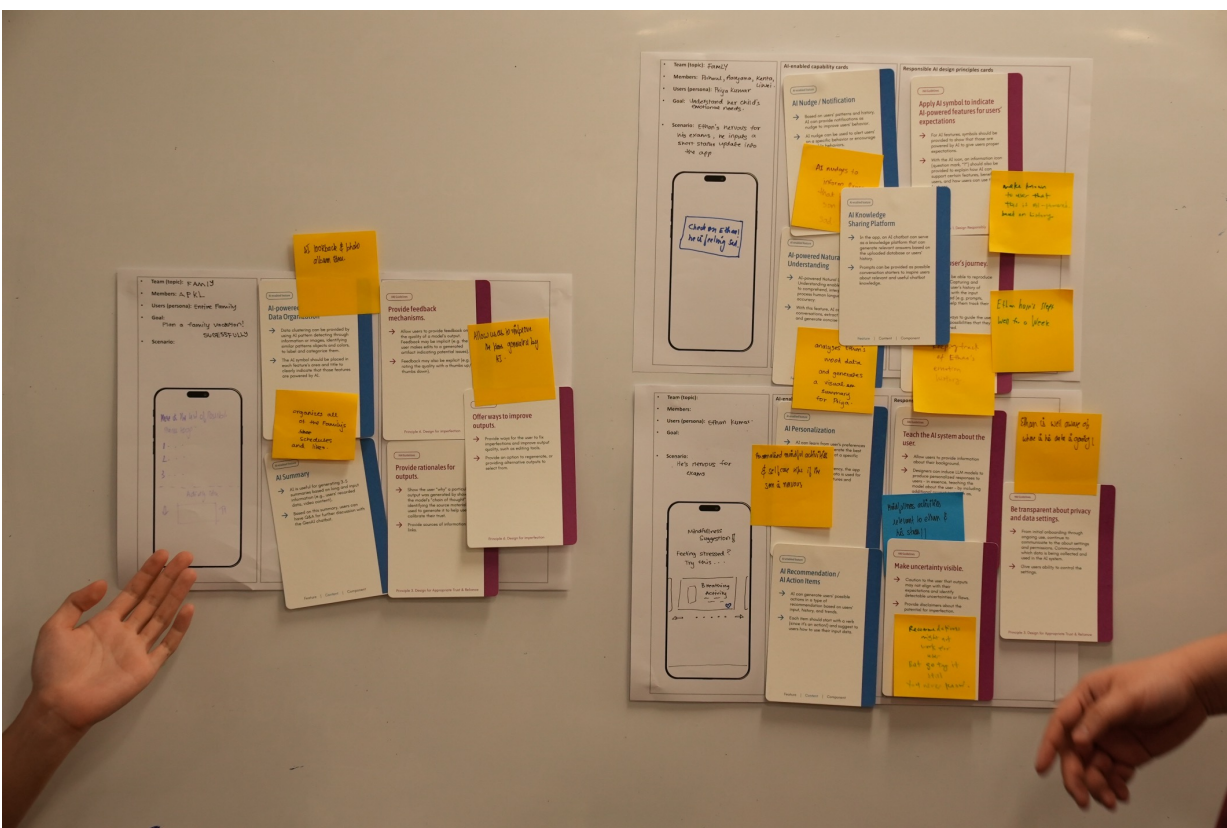
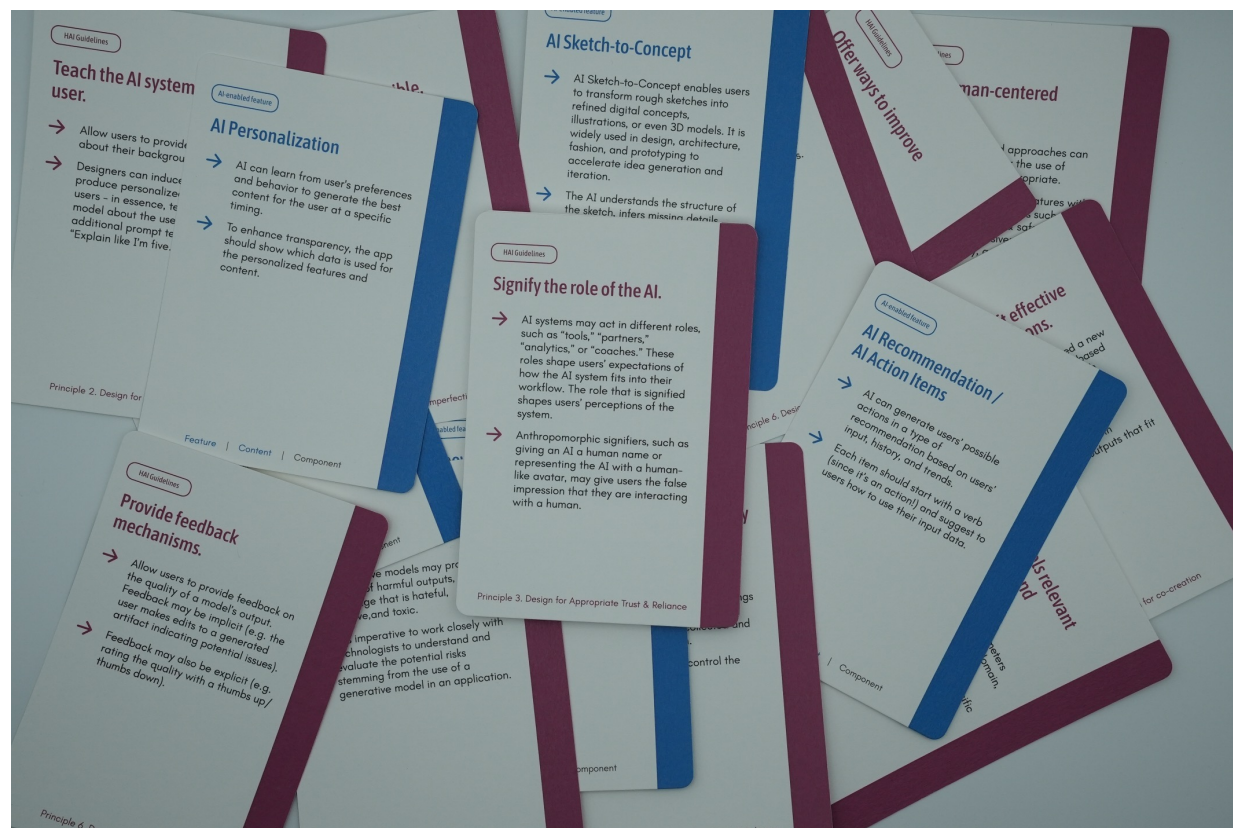
3. Challenges & Opportunities: AI Opportunity Cards Workshop

“Bridging the AI Literacy Gap” Many students entered the course with limited understanding of AI’s capabilities, limitations, and ethical considerations. Using AI Opportunity Cards helped frame AI not just as a technological layer, but as a design material to assist in translating abstract AI concepts into tangible features. Guided use of the cards encouraged students to explore potential AI functions alongside responsible AI design solutions.

AI Opportunity +
Responsible AI Design
ideation workshop
Developed from 2024-2025
Essential Skills in
AI UX & UI Design Courses



Check the workshop details via this QR code!



4. Students’ Learning Outcomes (Jan 2025 Sem)

Future Directions

- Cross-Disciplinary Collaboration:** Partnering with computer science, data science, and business students for joint AI projects.
- Extended Testing:** Longer-term projects with industry partners to evaluate AI services in authentic contexts.
- Open Resources:** Sharing AI opportunity card frameworks and case studies in an open-access repository for educators.

