



UTM
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SECP 1513 Technology & Information System
Section 04

**Design Thinking Report: Chat-Based AI for
Healthcare**

Tech Titans

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1. Introduction

In response to the growing need for accessible healthcare solutions, our team of seven members embarked on a design thinking journey to create a chat-based AI aimed at helping individuals recognize illnesses. The project focuses on developing a prototype using A2 paper and handwritten elements. Each team member contributes unique skills and expertise to ensure a comprehensive and effective solution.

2. Detailed Design Thinking Process

a. Empathy

Description: The team began by conducting user interviews and creating composite characters representing potential users. Questions and answers were documented to understand user needs deeply.

Evidence: Video recordings of user interviews, images of composite characters, and a log journal capturing key insights

b. Define

Description: Defining the problem involved synthesizing the collected data to identify unfulfilled needs. Felicity, our composite character, served as a focal point for evaluating emotional aspects related to health.

Evidence: Images of defined problem statements and log journal entries highlighting the emotional aspects uncovered.

c. Ideate

Description: The ideation phase involved brainstorming sessions where the team generated diverse solutions to address the defined problem.

Evidence: Visual documentation of brainstorming sessions, including mind maps, sketches, and photos of team members engaged in idea generation.

d. Prototype

Description: Prototyping encompassed the development of the A2 paper prototype. Each team member had a specific role in bringing the prototype to life, combining handwritten elements for the chat-based AI.

Evidence: Progress images of the prototype, individual contributions, and a log journal tracking the development process.

e. Test

Description: The prototype underwent testing with potential users to gather feedback and make necessary refinements.

Evidence: Video recordings of user testing sessions, images of prototype iterations, and a log journal documenting user responses and identified improvements.

3. Detailed Problem, Solution, and Team Collaboration

Problem: The challenge was to create an accessible AI solution that assists users in recognizing illnesses, considering emotional and psychological aspects.

Solution: The team collaborated to design a chat-based AI prototype, integrating handwritten elements for a more personal touch and user engagement.

Team Collaboration: Regular team meetings, brainstorming sessions, and a collaborative approach to prototyping ensured the successful integration of diverse skills.

4. Design Thinking Assessment Points

a. During the End of the Project Demonstration:

Evaluate the effectiveness of the final prototype.

Assess user feedback and overall project success.

b. During the Transition Between Design Thinking Phases:

Regularly assess team progress and identify potential challenges.

Ensure alignment with user needs and project goals.

5. Design Thinking Evidence

a. Sample Work by Students:

Showcase individual contributions to the project.

Highlight the diversity of skills within the team.

b. Record for Each Phase:

Maintain a detailed log journal with entries for each design thinking phase.

Compile video and image evidence for empathy, define, ideate, prototype, and test stages.

6. Reflections (Individual)

a. Goal/Dream with Regard to Course/Program:

Each team member reflects on personal goals and dreams related to their academic program.

b. Impact of Design Thinking on Goals/Dreams:

Evaluate how participation in the design thinking process contributes to individual goals.

c. Action/Improvement/Plan:

Outline specific actions or plans for improvement based on the design thinking experience.

7. Task for Each Member

Team Leader: Coordinate team activities, facilitate meetings, and ensure project alignment with goals.

Research Specialist: Conduct user interviews, create composite characters, and contribute to defining the problem.

Ideation Facilitator: Lead brainstorming sessions, document ideas, and ensure diverse perspectives.

Prototyping Lead: Oversee the development of the A2 paper prototype, incorporating handwritten elements.

User Testing Coordinator: Organize and conduct prototype testing sessions, gather user feedback, and identify areas for improvement.

Documentation Manager: Maintain a comprehensive log journal, record team progress, and compile evidence for each phase.

Reflections and Goal Analyst: Facilitate individual reflections, assess the impact on personal goals, and guide team members in action planning.

This design thinking process aims to create a holistic and user-centered chat-based AI for healthcare, providing evidence at every step to ensure transparency, accountability, and continuous improvement.