



SECP1513-08 Technology and Information System

Design Thinking Project

SECTION : 08

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1. Introduction

Travel industry like any other sector has undergone revolution due to the coming of technologies, specifically Artificial Intelligence. Our proposed AI-Based travel app is to make the travelling process easier, improve interactions between the users, and improve their experiences. The concept of the application is artificial intelligence in the choice of a travel route, viewed trips with ratings from other users, search in the area of the places of interest, and community with other travelers with similar interests. This report will explain the design thinking process with appropriate examples, identify and evaluate on the key issues at each of the stages, and share personal learning and benefits that came with the project.

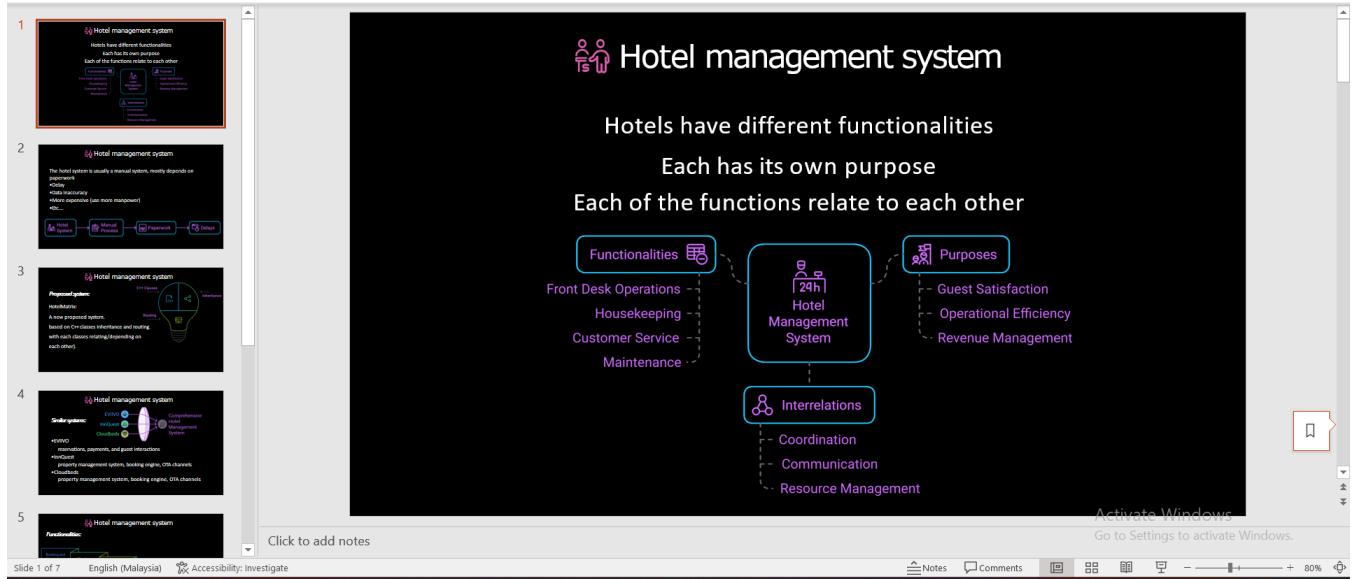
2. Design Thinking Stages and How is it Described

a. Initial phase: Hotel Management System

Firstly, our team has discussed the idea of the hotel management system. However, it was considered as not helpful because there are already many options similar to it in the market. Stakeholders' feedback showed that a more creative and versatile app was required.

Evidence:

- The presentation we gave about our idea



b. Second phase: New idea AI Trip Planning App

In the second phase, the team ideated on the AI enabled trip planning application. This idea relies on several pain points of a user and its benefits; It was designed to provide recommendations of new places, an option for a traveler review system, and even the ability for travelers to communicate.

Evidence:

- The first initial design of the app

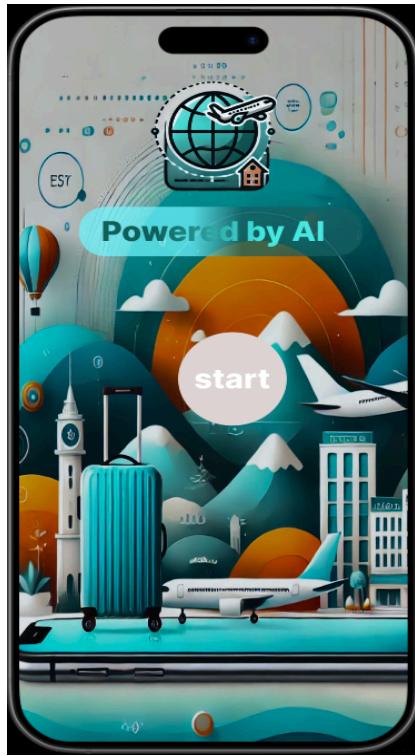


c. **Last phase:** Project Prototyping and finalization

To facilitate this, the team moved to proposing the creation of the prototype for the AI trip planning application. Skeletal prototypes in the form of wireframes and mockups to help design and develop the app interface were produced and refined in subsequent rounds in consultation with the users.

Evidence:

- The finalized design of the app.



3. Detailed Descriptions: Problem, Solution and Team Work

Problem

Travelers are unable to find good places to visit, or narrate their experiences to people of like mind or even find people to interact with.

Solution

The AI is utilized in the attraction recommendation process, a rating/feedback feature for users, and a matching platform for travelers.

Team Collaboration

The team involved designers, developers, and travel consultants since everyone was involved in the project. Sprint meeting, sprint review meeting which are held bi- weekly, and scrum board used to track progress contributed daily progress.

Evidence:

- A picture of the group collaboratively working in the student lounge.



4. Design thinking assessment points are as follows:

a. End of Project Demonstration

A detailed demonstration on the use of the application will be provided in order to determine its efficiency. To counter check the final solution and opinions, this will be all recorded and uploaded for further feedback on the project.

b. During the transition between design thinking phases

At the end of each phase the group gathers and collects information from potential users about the efficiency and the effectiveness of the app, Then assessments and corrections are given based on the feedback of users and the outcome of the meeting.

Initial Idea to New Idea: Intent analysis and identification of the idea and its creativity, and attractiveness.

New Idea to Prototyping: Affirmation of the design and feature concerns from a user-perspective (students).

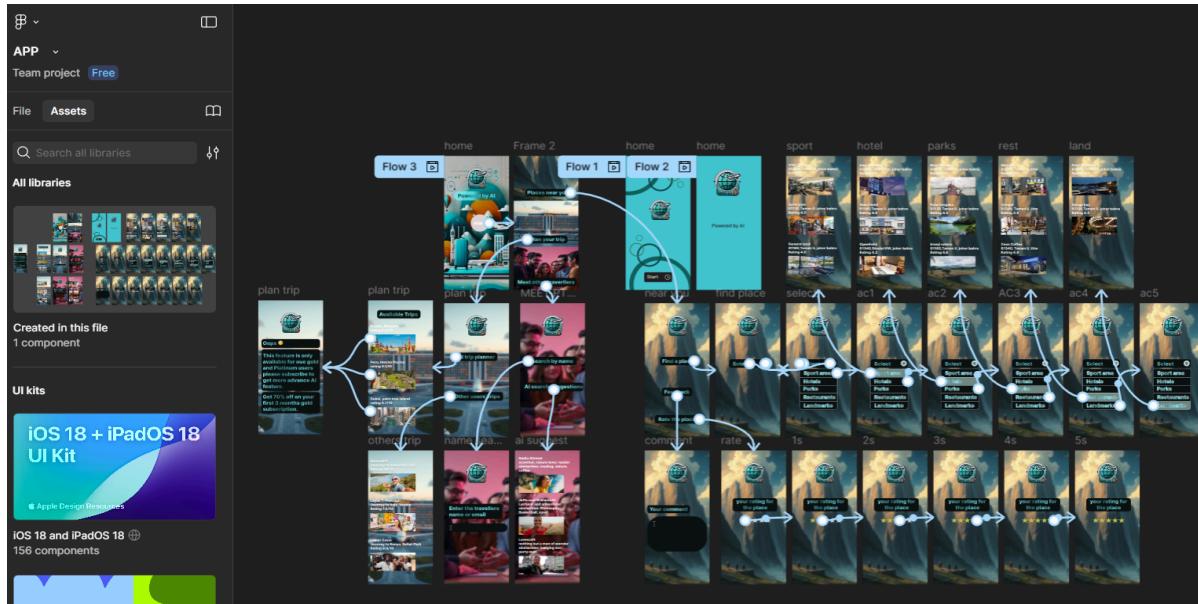
Prototyping to Testing: The types of assessment that are most relevant include usability, understanding, and attraction with user-based testing.

Evidence:



5. Design Thinking Evidence

a. The sample work by students



b. Records for Each Phase

- Empathy

Questions: posing three questions: “What, do you think, is the most difficult in preparing a trip?” , “How frequently do you use travel applications?”, “How many reliable travelling applications are there?”, “does any any Ai”

Answers: Lack of sufficient information and absence of individualized advice frustrates the users.

Composite Character: given in example a young traveler, 30 years old or less in search of a one-stop shop for both planning and connection.

- Define

Problem: The latent traveller needs recommendations and social presence.

Solution: An app that can do that, easy to use, interactive, very eye catching, and can allow even more functionalities.

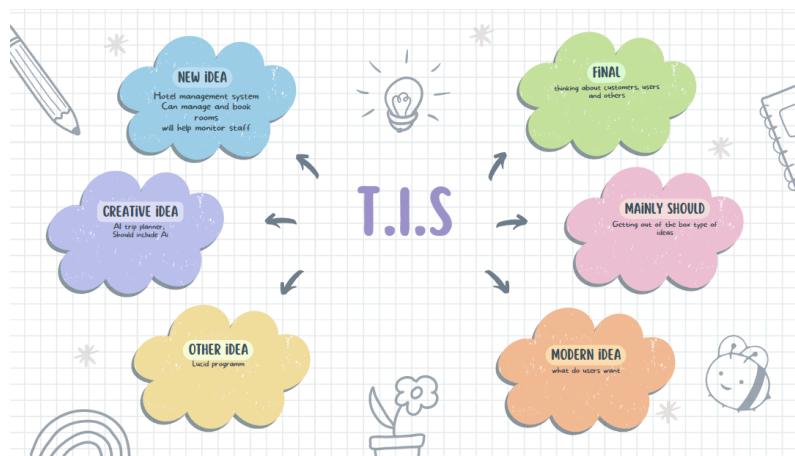
- Ideate

Prototypes of the app were developed based on the ideated solutions.

Methods Used: Mind maps, and collaboration.

Evidence:

brainstorming map.

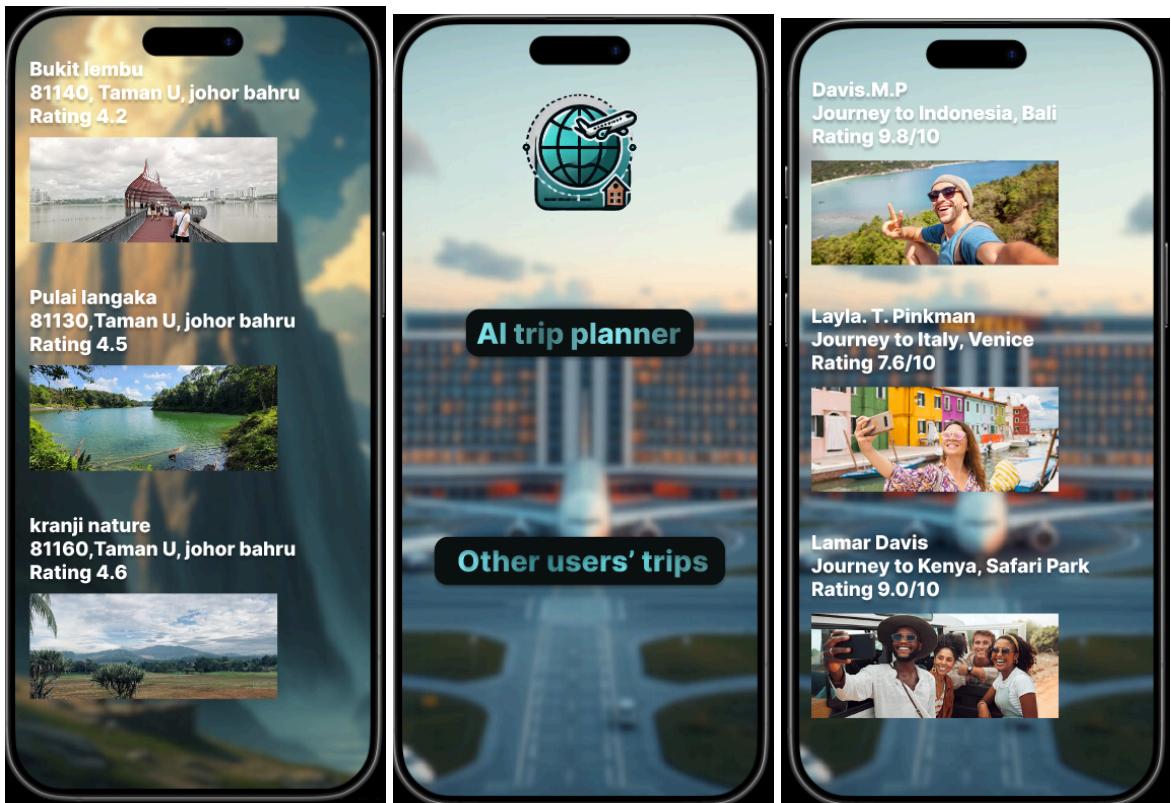
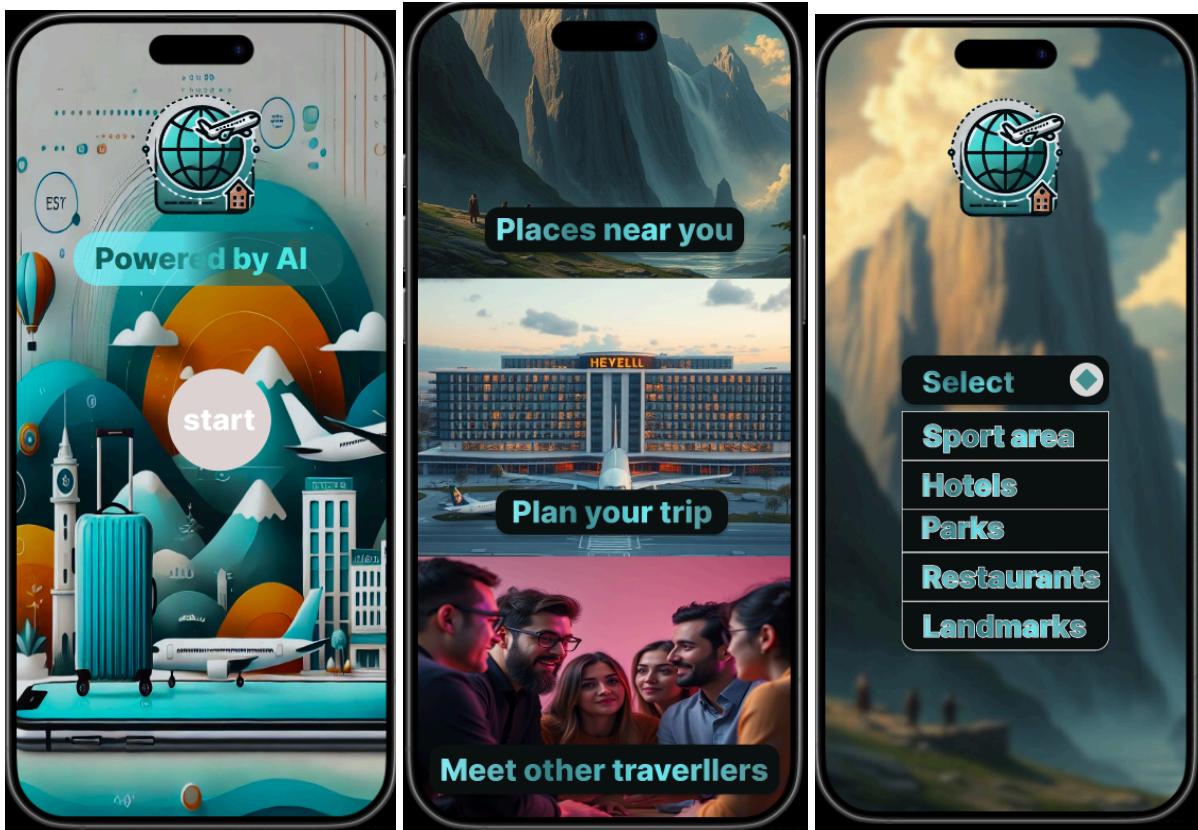


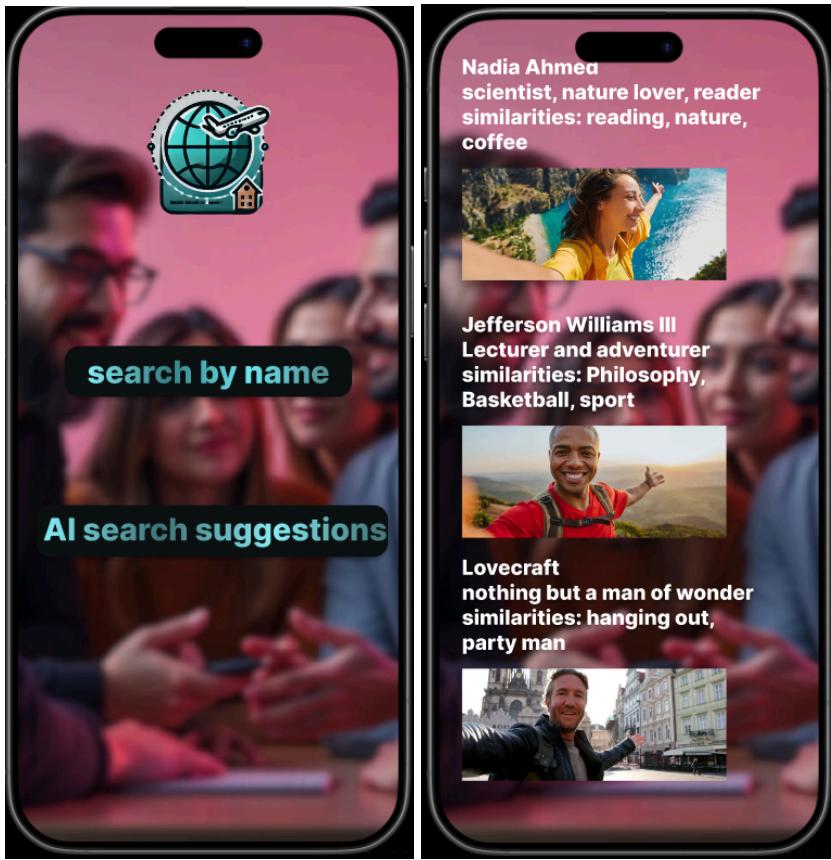
Outcome: A clear idea and problem solution, also working prototype with essential features for user testing.

- Prototyping

The prototype is developed, based on the ideated brainstorm and the prototype is given.

Here are some of the prototyping pages of the final version:





- Testing

The prototype was tested with team members as potential users and feedback was gathered and features were refined.

- **Methods Used:** Usability testing and user feedback sessions.
- **Evidence:**

Members testing and potential user interview



- **Outcome:** Valuable insights led to finalizing and approving the product and idea.

6. Reflection (Individually):

1- Abdalla Ali Abdalla:

a. Goals and Dreams:

My ultimate learning objective includes exercising the proficiency in AI leadership for the development of organization-centered human environments with positive impacts on the society.

b. Impact of Design Thinking:

This process stressed on the values of embracing empathy, prototyping and incrementalism, values that I wanted to achieve in order to yield meaningful technologies.

c. Action Plan for Improvement:

- Go for further and more specialized certifications in design thinking.
- It is recommended for me to attend industry workshops in order to get acquainted with the updates.
- Work on various assignments to extend the area of professional competence.

2- Othman Hassan Othman

a. Goals and Dreams:

I am interested in designing applications overcoming user experience gaps and generating value from new technologies.

b. Impact of Design Thinking:

It has improved my flexibility from which I have gained the all-important user needs analysis & Solution defining part of my goal.

c. Action Plan for Improvement:

- Work on real-world AI projects to gain hands-on experience.
- Increase technical advanced coding skills through the coding bootcamps.

- Connect with the experts from the AI and design field.

3- *Musab Elsadig Elmaki Ahmed*

a. Goals and Dreams:

To make a career in the field of UX/UI design with the specific interest in artificial intelligence convenient platforms to enrich and widen the human users' experience.

b. Impact of Design Thinking:

This project has helped me develop a better grasp of positive space design and the cycle of design common to UX/UI.

c. Action Plan for Improvement:

- Take up complex courses in UX/UI.
- Establish an organization portfolio of personal case studies.
- avoid making a common mistake of ignoring professional advice from senior designers.

4- *Mohamed adel Abdullah Mahmoud*

a. Goals and Dreams:

My objective is to contribute to the travel tech sector by bringing value added and easy to use enhanced travel experience solutions to the market.

b. Impact of Design Thinking:

Putting into practice the design thinking methodology has helped me to understand how well one can strike a balance between the user and feasibility factors which are crucial in the realization of my goal.

c. Action Plan for Improvement:

- Concentration should be made on understanding prioritized AI algorithms on problem solving.
- Attend more travel tech centric hackathons.
- Maintain updated on any new trends in Artificial Intelligence technology.

7. Each member task

1. Abdalla Ali Abdalla
 - Initial Idea,
 - Presentation
 - Final idea
2. Othman Hassan Othman
 - Management of the project
 - prototype design
 - video editing
3. Musab Elsadig Elmaki Ahmed
 - Report revision and correction
 - prototype design
 - brainstorming ideas
4. Mohamed adel Abdullah Mahmoud
 - prototype desgin
 - writing the report
 - brainstorming ideas

Appendix:

Youtube Video Link: <https://www.youtube.com/watch?v=Pk7YmEeaUr4>