HW 4: Final Project Proposal

1. Name of your project:

Cloud²

2. Team members:

Fred Xu
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3. Short summary of your project

In a world where rapid modern life often confines us to structured environments, our interaction with the natural world diminishes.
One of the overlooked elements is the artistry of cloud formations. These natural wonders not only offer aesthetic pleasure but also hold educational value, yet they remain unappreciated due to our indoor-oriented lifestyles and screen-focused attention.
This project specifically targets urban dwellers, particularly families with children and educators, who are seeking meaningful ways to reconnect with nature and enhance learning through innovative technology.
Our solution is an advanced cloud-sensing device integrated with a companion app, 'Cloud Squared'.
This system not only captures fascinating cloud shapes, offering educational riddles for user engagement but also features time-lapse photography, enabling users to observe and understand the evolving patterns of the sky. The app acts as a window to the outdoors, providing a visual narrative of the environment through time-lapse sequences that bring the sky's story to life.

4. Technologies you plan to use

- Gemini Api
- Azure

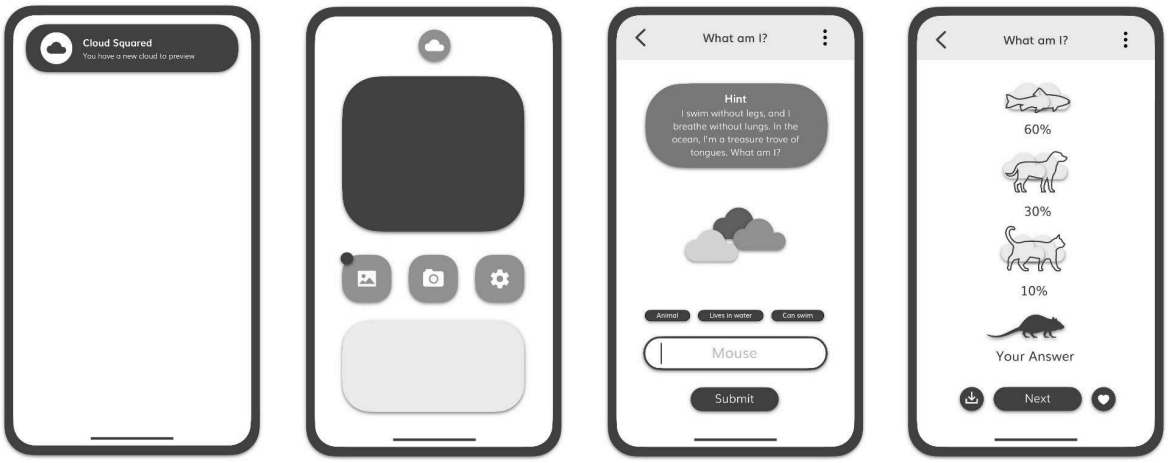
- Streamlit
- Sql

5. User Stories

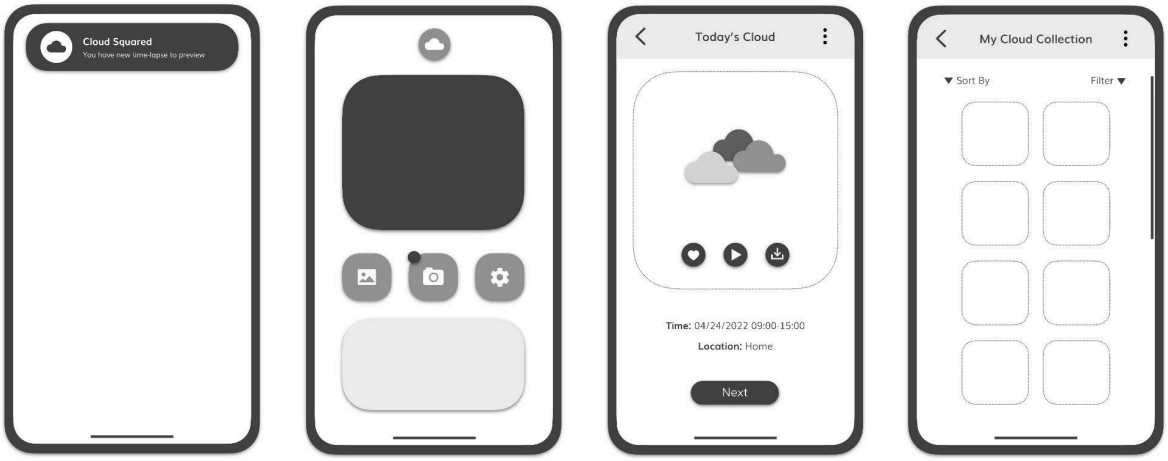
1. As a working stiff, I would like to view the pictures of clouds intelligently captured by the device on the app and save favorite pictures to my own phone, SO THAT I can know what beautiful clouds have passed by my window today.
2. As an app user, I want to interact with the pictures through the app, guess the shape of the clouds and have the AI assistant reveal the mystery to spark the imagination!
3. As a nature lover, I would like to learn about different cloud shapes through the app, with the AI assistant doing the science for me so that I can learn about meteorology and cloud formation in an interactive way.

6. UI Sketches

Function 1 - Cloud Shape Riddle



Function 2 - Time-Lapse Photography



Settings


Settings
Wifi Connection
Device Pairing
Account Setting
Video Tutorial
Feedback
Device Pairing
Cloud Squared Pro 2.0
Cecilia's iPhone
Finish