Title : AMEFURU -A rainfall sensor useful for daily life--

Abstract :

In this presentation, I will introduce the results related to an application called "Amefuru Alarm," which adjusts the alarm time based on the weather. This app accurately predicts the weather in real time. I typically commute to school by bicycle, but on rainy days, I use the bus, so I need to wake up earlier on such days. Although I check the weather for the next day before going to bed, the weather may change in the morning, leading to situations where waking up early was unnecessary because the rain stopped, or unexpected rain caused me to be late. This is the reason why I decided to develop this app.

The app is designed to be used on iPhones and iPads and is programmed using the Swift language in Playgrounds. The steps for creating the app are as follows:

1. Obtain real-time weather data from the Japan Meteorological Agency for the specified region.

2. Set the alarm time.

3. Check if it will rain and set a rain level based on the precipitation amount.

4. Adjust the alarm time based on the rain level.

5. Trigger the alarm when the set time is reached.

In this project, I was able to complete the task of "analyzing data from the Japan Meteorological Agency and obtaining data such as the probability of precipitation in a specified region by entering a location name and area name." In this presentation, I will discuss this content.