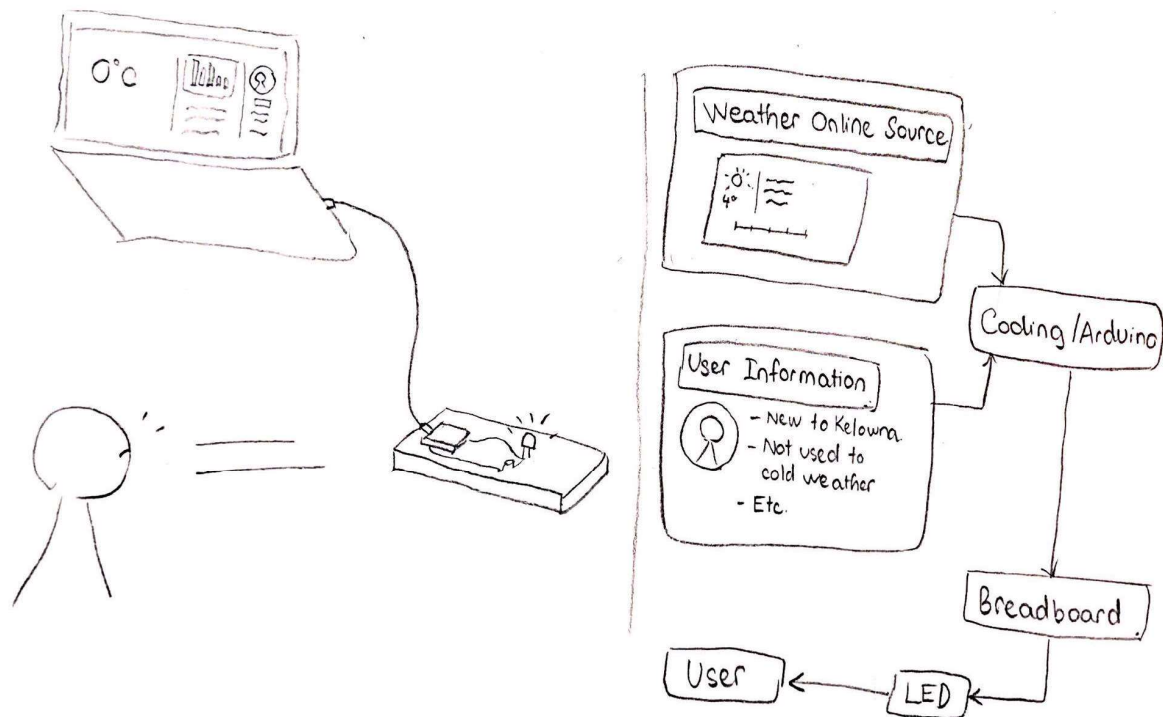# Project Title: Mini Weather Reporter

Group Members: Minh Dinh, Swakhar Poddar, Quỳnh Anhh, Wing Hei Chang (Chloe).

1. Idea

We aim to provide outwear suggestions to UBC students, especially first year students. The rationale behind is that we understand it is difficult to decide how many layers of clothing to wear in the morning when you have little experience of how cold or hot the weather is when being indoor for quite a while. With reminders through RGB light bulb, users can take in a more accurate suggestion.

2. Sketch

3. System operation

First, we use instant weather statics from openweathermap.org/, an open source web site, to have statics for our mini weather reporter.

Second, after fetching the data, we input them into our own code in Arduino. The code will determine what color is the RGB light bulb depends on the input temperature.

Third, upload the code into Adafruit Feather HUZZAH with ESP8266 WIFI that is connected to a breadboard with a RGB light bulb and jumping wires.

The RGB light bulb will light up with different color based on the weather. And we can include a color code sticker that suggests the number of layers of clothing. For example, the greener the light bulb, the more layers we suggest you to wear.

Fifth, the users can follow our suggestions and are ready to go.

4. Block diagram of the system
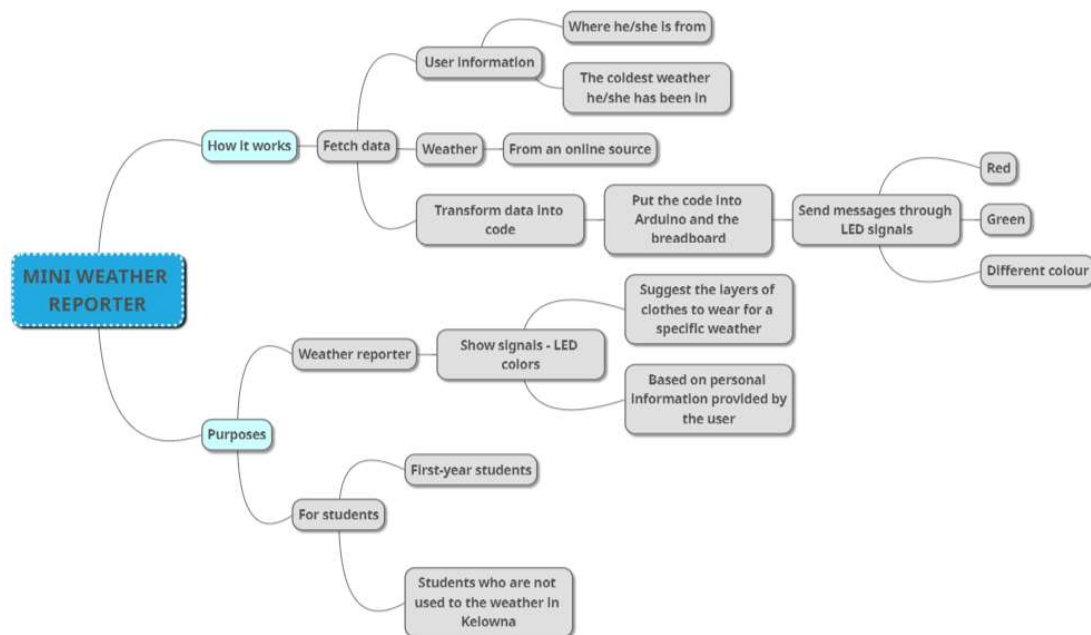
5. Work plan

BRAINSTORMING, GATHER INFORMATION (1-7/11)	Everyone
PROJECT PLAN (8-10/11)	Chloe and Anhh (sketching, block diagram)
CODING (7-17/11)	Eddie and Swakhar
3D MODEL (17-22/11)	Anhh
CIRCUIT DIAGRAM (20-22/11)	Swakhar
EXPERIMENT (22 -26/11)	Everyone
SURVEY (27-30/11)	Chloe