Observer Pattern: Weather balloon

The weather balloon is the observee, we think of the balloon as the only way for the Maynooth University to get an accurate temperature reading.

Constructor:
The weather balloon constructor initialises the temperature variable to 0.

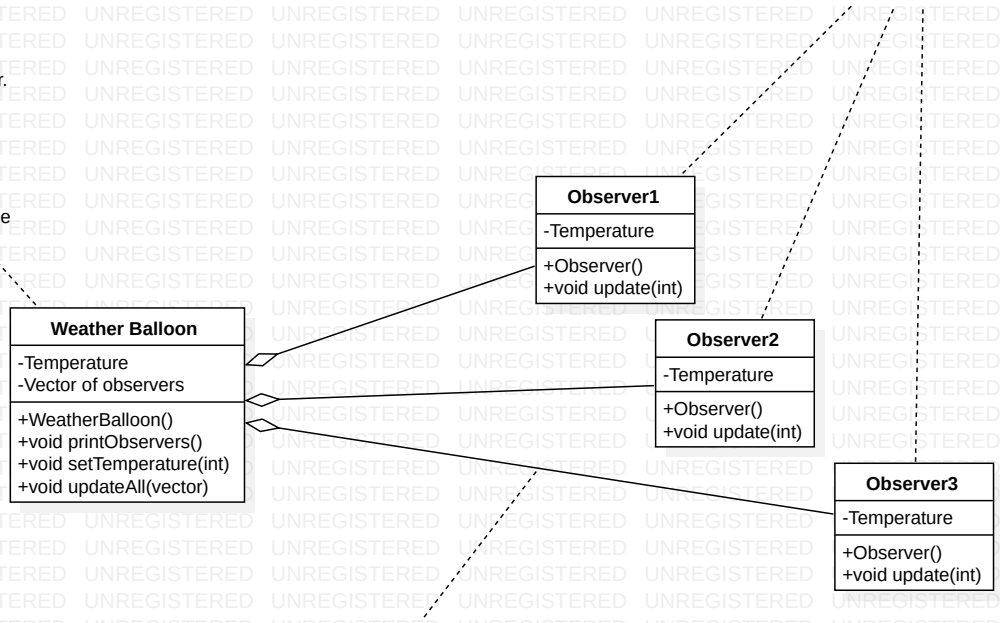
void printObservers():
This function prints the address's of its observers stored in the observers vector.

void setTemperature(int) :
Sets the temperature.

void updateAll(vector):
The vector stored in weatherballoon is passed into this function and it iterates through the observer vector, resetting the temperature of each element.

The Observers only contain a temperature variable and the ability to update it.

The weather balloon stores the observers in it's observer vector, the vector calls on the update function of the observers in its observer vector with the temperature that is currently stored in the weather balloon class.



This diamond shape is associated with the aggregation aspect of UML. This means that if the weather balloon is deleted, the childs are not automatically deleted.

UML Diagram for Observer Pattern provided on
https://github.com/SobblesBobbles/Teaching/tree/master/CS264_C%2B%2B/SoftwareDesignPatterns/ObserverExample