Weather station specification



User perspective

The weather station should be capable to display the following data on a 7inch LCD screen:

- Temperature
- Humidity
- Wind speed
- Wind direction
- Detect rainfall

The user will be able also to see some notifications in case of malfunctions.

Designer perspective

The weather station will be a reliable system that can provide the required data in a continuous way and in various weather conditions.

The weather station needs to be used outside, so it needs to be functional in summer at about 40 degrees, but also in winter at about -20.

The weather station will be able to send notifications if the temperature is more than 32 degrees Celsius or below zero degrees Celsius.

Also, if a sensor is not sending collecting any data for more than 30 minutes, an alert will be sent so that the malfunction to be acknowledged.

Constraints

The total costs for the hardware should not be more than 200 \$ and the delivery of the final product should not take more than 2 months.