the hardware is simulated using the python code which acts as the temperature and humdity sensor along with a motor connected which is working based on the temperature values.

the UI / WEB app is always monitored by the admin which shows values of temperature, humidity and user message which inidcates any alerts which in our case is the exceeding of temperature above a certain value.

the temperature and humdity values are sent to the cloudant db.

the mobile app is handled by user which acts as a wearable device. when he goes near the scanners , he will be able to view the temperature and humidity values. The app also contains an alert button which he shold use once he gets an sms on his mobile. the sms is activated once the temperature reaches 100 or goes beyond.

seeing the sms the user clicks on the button "ALERT!". which sends a payload to the WEB UI to the admin where he is in control of the motor.

once he recieves this alert, the admin clicks on "MOTOR OFF", which is sent to the python code which simulates the hardware in our case.

temperature and humidity values are stored in the sample database created in cloudant db