

Develop A Smart Home Automation Project

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Develop a python code for smart home automation application:
The following are the features:

1. Monitoring the temperature and humidity using the web app
2. controlling the lights and fans using Web Application
3. Sending the notifications if the temperature is very high.

To achieve this you need to connect the Watson IoT sensor simulator to IBM IoT device.

Program Code:

<https://github.com/smartinternz02/SI-GuidedProject-6294-1636439487/commit/938ccb9d316fffd2649e394aad298f0929e98c73>

Steps:

1. Edit your IBM Watson Device Credentials in the Python Code

```
organization = "ed4xjr"  
deviceType = "device"  
deviceId = "d1"  
authMethod = "token"  
authToken = "12345678"
```

You may use the same device and credentials as created previously.

2. Install **ibmiotf** from cmd by using the command: **pip install ibmiotf**

3. Save the code and RUN using the Python IDLE.

4. The Output should be visible as below

The screenshot displays the IBM Watson IoT Platform interface. At the top, there's a navigation bar with tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces'. Below this, a search bar is present. The main content area shows a list of devices, with one device 'd1' selected. The device's status is 'Disconnected'. The 'Recent Events' tab is active, showing a table of events. The table has four columns: 'Event', 'Value', 'Format', and 'Last Received'. The events are listed as 'Data' with a value of '{"d":{"temperature":23,"humidity":45}}' in 'json' format, received 'a minute ago'. At the bottom, a status bar indicates '0 Simulations running'.

Event	Value	Format	Last Received
Data	{"d":{"temperature":23,"humidity":45}}	json	a minute ago
Data	{"d":{"temperature":23,"humidity":45}}	json	a minute ago
Data	{"d":{"temperature":23,"humidity":45}}	json	a minute ago
Data	{"d":{"temperature":23,"humidity":45}}	json	a minute ago
Data	{"d":{"temperature":23,"humidity":45}}	json	a minute ago