AWAKEN YOUR HOME:PYTHON AND THE INTERNET OF THINGS

Home Assistant is an open-source home automation hub written in Python 3 with an active community and with support for over 100 different devices and platforms. It models the Internet of Things using two concepts: there are events that happen and there are entities that can hold state, can be controlled or both. Automation rules are building on top of these concepts: they are triggered by an event, can have conditions based on the state of entities and will control entities or call external services.

The class was started by telling about the what is a hub and it's essence? A hub mailnly consist of the Home control and the internet of things .There are a lot of devices which can be automated.for example the lights in a room and the media player..etc
The next is about the core of automation.The automation are triggered by an evevt and these events are based on the conditions which is the current state of the device .these action can be controlled by external service nor devices.

CORE ARCHITECTURE

1)Evevt driven system-software architecture pattern promoting the production, detection, consumption of, and reaction to events
2)State machine-It's a device which has no notion of light or switches.
3)Service machine-To track available services.
4)Timer-To notify time

The next is about the support for devices in Home assistants.
It mainly consist of an entity component such as light ,switches..,A platform and program that connects Home assistant core (Python).

Then each platforms are explained with the help of suitable python programes such as sensor platform,switch platform and automation component.