Novum

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EdTech A.I. Program

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Novum: What is it?

Novum, in Latin, means 'Revolution'. Novum is a potential idea of a system that helps remove repetitive tasks from the workflow of a human. Everything from pre-heating the oven to choosing the right clothes for the day will be handled by Novum.

Novum integrates IOT (Internet of Things), Mechanics, Electronics, Machine Learning and Data Science with the help of Artificial Intelligence. So, switching on your Geysers in the morning, handled by Novum, setting the temperature of your Air Conditioning, handled by Novum, should you carry an umbrella, let Novum decide.

The possibilities are endless. With the right kind of data and development, Novum has the potential to eliminate almost every repetitive task and make someone more productive.

So, How Exactly Would Novum Work?

Such a project is bound to complicated... Right?

How Does It Work?

Well, the project is certainly a work-in-progress, but I have figured a few things out to help you truly understand it's potential.

Alright, I want you to imagine the first thing you do after waking in the morning. I am guessing it's turning on the geyser to take a bath. Maybe, after that you turn on your oven to heat your cereal. It's time to get ready now. But you aren't sure if you should carry an umbrella or not. Now, you're at your workplace. But you're constantly getting buggered by notifications from annoying relatives, so you mute them.

I am sure you have all kinds of small tasks in your day that aren't really that productive. What if you could completely hand over the control of these tasks to someone else. Someone, who, let's say, resides inside your smartphone.

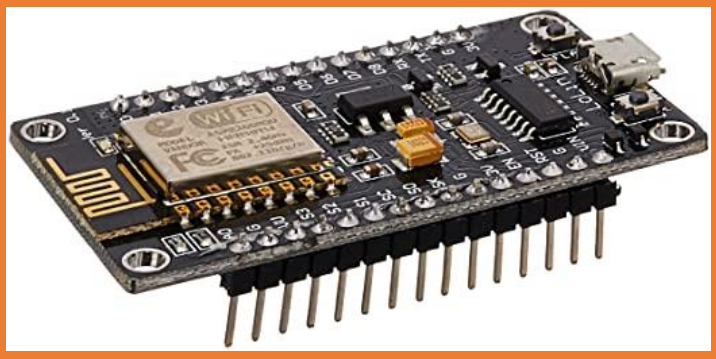
This kind of technology isn't exactly new. It has been tried before. What hasn't been tried is expanding the horizon. Muting notifications? There is Focus Mode for that in Android. Turning on your Geyser in the morning? Ask IOT professionals how easy it is to do that. What's new and truly revolutionary? Integrating all of this together and completely most of the control to a synthetic.

A sneak into Novum! How Does It Control Home Appliances?

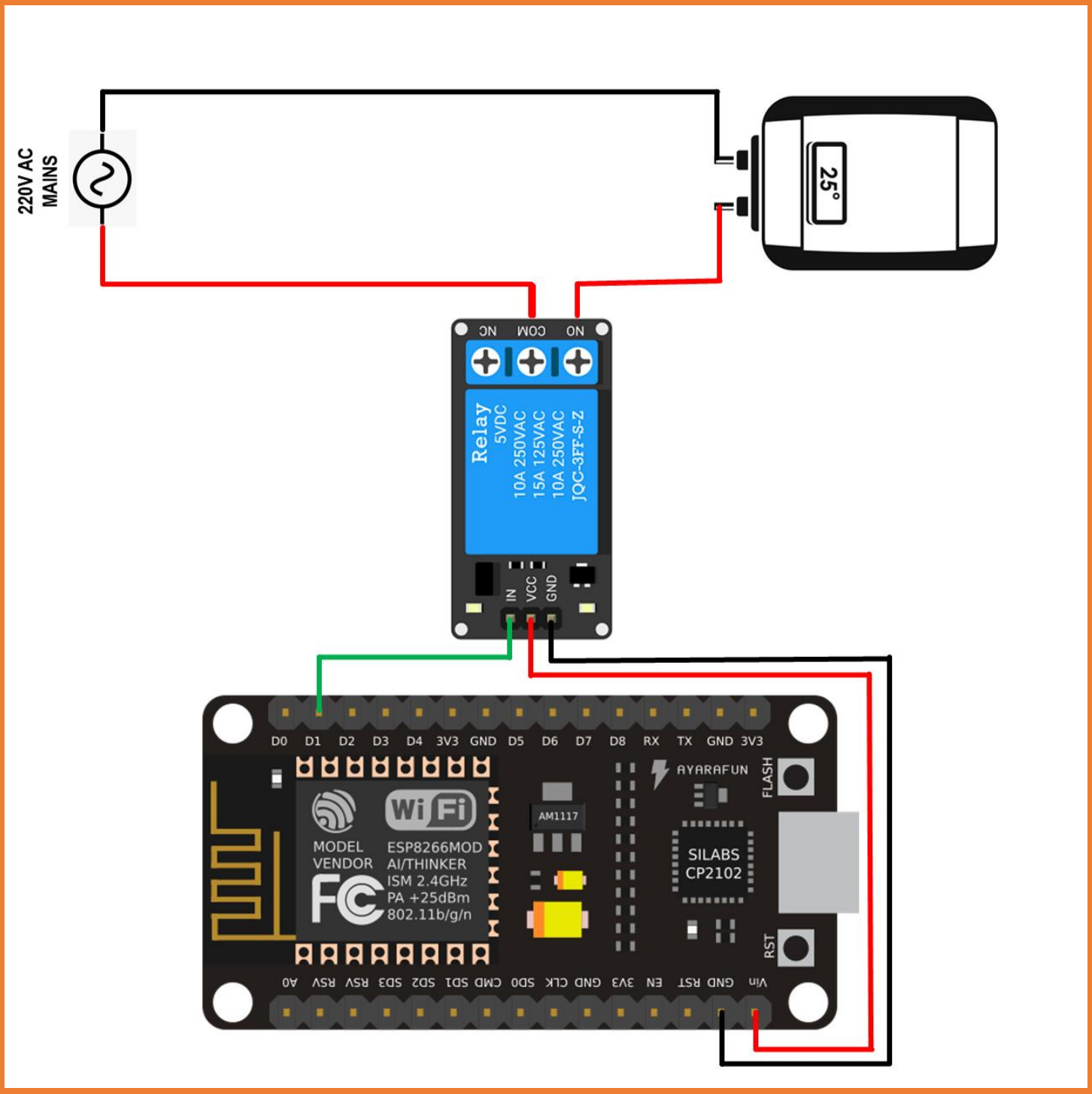
Well, the answer is kind of complicated. However, I will do my best to explain. So, we have been talking about IOT, or Internet Of Things. It is a relatively new and developing field. IOT involves connecting various electrical components of a system to the internet. This is mainly done to achieve remote control or to enable the system help retrieve information from the Internet.

IOT provides all kinds of interesting possibilities. You could be in New York and controlling your refrigerator in Mumbai. Using the same technology, Novum can also control your home appliances.

Using ESP8266 NodeMCU circuit board, which is a board that is developed for IOT purposes, we control a relay. A relay is sort of a switch, but instead of physical moving components, we use electricity as a indicator as to when to turn on the relay or switch. A relay can handle very high voltages. Therefore, it can be used to control AC appliances.



ESP8266 also has onboard Wi-Fi module built into it. So, it connects to your Wi-Fi router, and you can access it from the internet.



This circuit diagram explains how every component connects. Next, we program the ESP8266 to respond to our commands. The programming is done using Arduino IDE and its libraries. Controlling a single appliance with this method costs around $5.

If you want to read the program, please click here.

So, what exactly will an A.I. do in this system?

Making something work on a set of commands is simple. Making someone make those commands is the real task. In the example above, I provided the instructions. What my goal with this project is, I want to eliminate the process of giving instructions.

The A.I. will collect data from the user and his family, and then use the data to automate simple things like choosing clothes for someone, or switching on a computer, et cetera.

It will work on data collections and synthesize it's own instructions.

For example, if I have an alarm at 5'o clock in the morning, and I wake up and check my social media accounts first, I want the A.I. to be able to collect that data and automatically sort my social media notifications. If I then use the coffee maker to make some coffee, I want the coffee maker to be turned on so that I can directly drink the coffee. If I am at my work place, I want the A.I. to know it and turn off the air-conditioning and lights at my house. If the weather forecast says it might rain today, I want the A.I. to notify it to me. If I listen to a particular playlist, I want Novum to automatically play it when I am free.

With this system, the A.I. will be able to simulate a smart home with it's own intelligence.

This will greatly increase the novelty and productivity of the household and help us spend our day making decisions that matter.