



Name: Shashank Bagda	Roll Number: 92100133020
Subject Name and Code: Foundation Skills in Sensor Interfacing 01CT1103	Date of Experiment: 04-01-2022

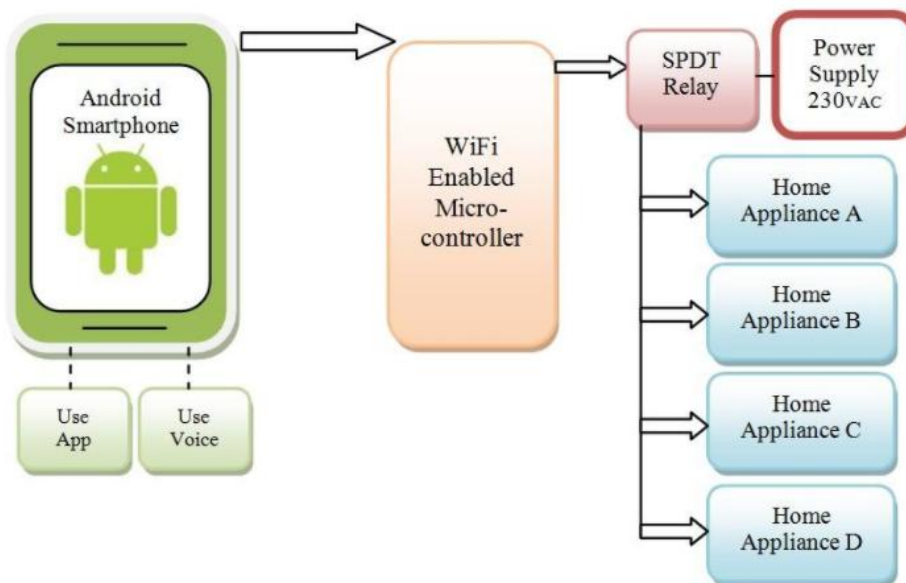
Task: Understand the IoT and Create account in <https://thingspeak.com/> platform.

Website: <https://thingspeak.com/>

About the IoT:

1. Home automation

Home automation is one of the best examples of IoT. Smart homes or IoT-based home automation systems are becoming popular day by day. In a smart home, consumer electronic gadgets such as lights, fans, air-conditioners, etc. can be connected to each other via the internet. This interconnection enables the user to operate these devices from a distance. A smart home is capable of lighting control, energy management, expansion, and remote access. Currently, this application of IoT is not utilized at a large scale because the installation cost is too high, which makes it difficult for a majority of people to afford it. However, home automation holds quite a promising future.





2. Shopping Malls

IoT finds its major application in shopping malls. In most of the malls, a barcode scanner is used to scan the barcode present on every product. After scanning, it extracts the necessary information and sends the data to the host computer. The computer is further connected to a billing machine that hands over the bill to the customer after proper processing. All these devices are connected together with the help of the Internet of Things.

Output:

The screenshot displays the 'My Profile' page on the ThingSpeak website. The page is divided into several sections: 'My Profile', 'Help', 'Account Settings', 'API Keys', and 'API Requests'. The 'My Profile' section shows the user's email as 'shashankbagda167@gmail.com', their time zone as '(GMT-05:00) Eastern Time (US & Canada)', and their username as 'mwa000025092975'. The 'API Keys' section shows a 'User API Key' of 'KFKSIL0HFVPMGPHU' and an 'Alerts API Key' of '<no API key>'. The 'API Requests' section shows a 'Get Channel List' request, a 'Create a Channel' request, a 'Clear a Channel Feed' request, and a 'Delete a Channel' request. The 'Help' section provides instructions on how to use the account settings.

Application: Health, Traffic monitoring, Hospitality, Agriculture.

Conclusion: The digital era revolutionized human society during the last century. In fact, information digitization processes have led to the design of computers, phones and other machines offering a plethora of applications running on standalone computing machines. Then digitized information transport developed. This has introduced digital communication and networking where machines are connected to form very large networks and offer remote applications. These machines connected to these networks created the opportunity to deploy different services, either in voice communication, data transfer or entertainment, such as TV, and has led to this digital society.