The simulation is built on the Mininet-Wifi an extension of Mininet network emulator for Wireless support to simulate the 802.11 standards[1]. Mininet-Wifi as Mininet parent simulator creates virtual nodes on Linux kernel name-space[2]. Application code using python.

Topology over view
The simulation involved the 3 access points, 3 smart meters, 3 actuators, 28 sensors and one fog computing server

On simulation the algorithm behind uses a loop that a number adds by one and when it is divisible by 3 the smart meters send their statuses to the fog server, when a number is divisible by 4, the sensors send their statuses to the fog server as well, when the number is divisible by 5 the server sends commands to actuators, when a number is divisible by 3 and 4 both smart meters and sensors send their statuses to the server, when a number is divisible by 4 and 5 sensors send statuses to the server and server sends some commands to actuators and when the number is divisible by 3, 4 and 5 all nodes in the network send traffic

REFERENCES

- [1]. https://mininet-wifi.github.io/ (Accessed on 19th May 2020)
- [2]. http://mininet.org/ (Accessed on 19th May 2020)