Intelligent Workstation - Abu Jose George

About the speaker

I am ABU JOSE GEORGE .I am an 8th Semster student in Electronicd and Communication Engineering at Govt Model Engineering College Kochi. Basically I am a tech enthusiast and i am very much interested various projects. Project design and implementation are my hobbies. I am proficient with various embedded systems programming languages and machine learning to a certain extent.

Abstract

The project aims at creating a smart way to organize the operations in a workstation using Internet of Things. A whole office is modelled as a system of connected nodes which communicate with each other and make decisions on their own based on the communications Different nodes are placed at various parts of a office. The node placed at a cabin or room detects the presence of employee and the conditions at that room. For example temperature ,light availabilityetc. and the ID of the person who is in charge at the specified room. Nodes placed at the cabin room detects the login information of employees available at the moment. The node placed at the server room provides all the above information to the administrator These nodes detect and send the information to a main server which collect and distribute the data and make decisions based on them. The server also keeps an activity log regarding various happenings at the nodes. For example, the login and logout information of employees The project also incorporates a live chat extension with user levels for communicating with the main server and for prioritized users to implement certain commands like the status of a device etc.

Technologies Used:

Arduino IDE
Wit.ai
Numpi
Python
Pywit
Python-telegram-api
Apache, Php5
MySQL, phpMyAdmin
RF24 Library
Raspbian