

# SMART EMPLOYEE TRACKING SYSTEM

## INTRODUCTION:

Employee tracking system monitored and tracks company employee's using android technology. • The application which developed for employee tracking is called as “Mitter-bitter”. • The manager can track Employees all day to day activities like SMS, call logs, data usage, web browser history, unauthorized calls. It also tracks the current location of the Employee

Tracking system is a window based web application. A simple but one of the most promising applications that will work as a interface between the user & Admin.

Effective management and technical support are required for the sucess of large scale projects. Many tasks must still be performed by human being, including plan generation, construction of activity networks, and project monitoring. These prject monitoring apabilities are realized using diagnostic and dealing heuristics.

## LITERATURE SURVEY

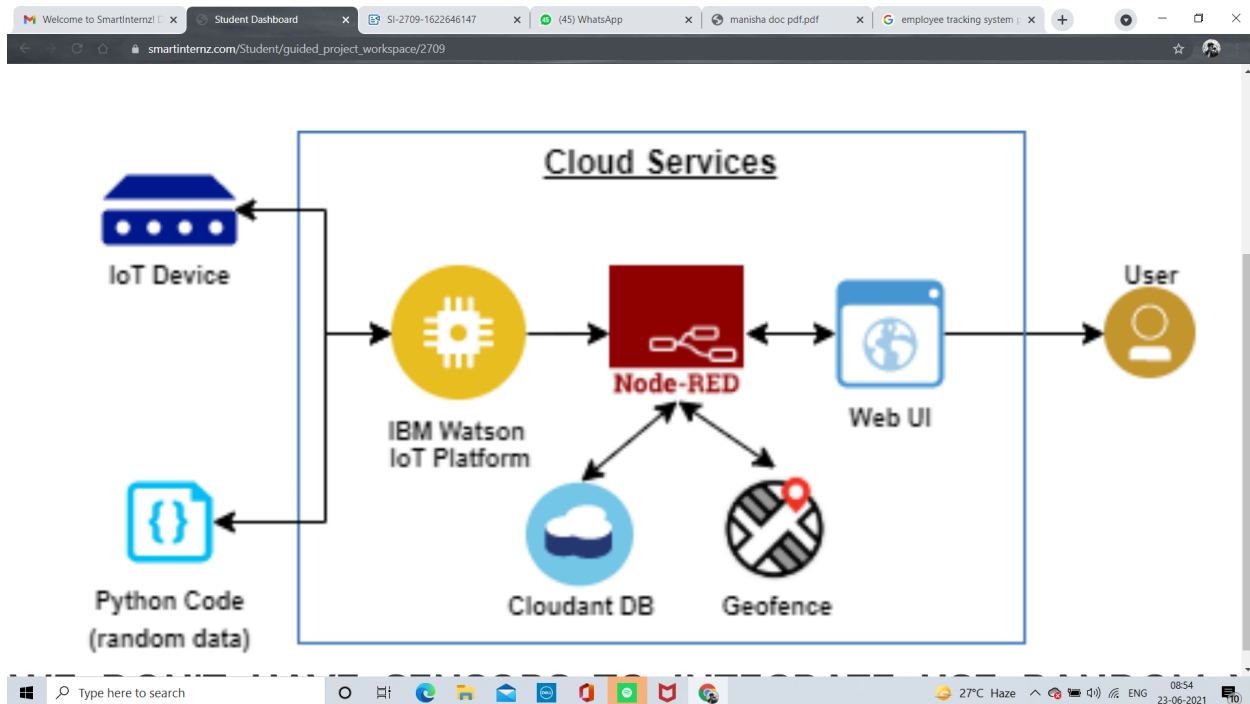
### Existing Problems:

IoT has enabled smart manufacturing that increases safety, improves performance and services as well as reduces time and cost. It has been a driving force behind the industry movement. Efficient data collection, enhanced automation, and analytics are all possible with the help of IoT. With a large variety of IoT devices, manufacturing units are able to leverage their workflow more efficiently and accurately. For example, companies are tracking assets, collecting data, and performing analytics using IoT sensors placed in equipment and devices. These sensors monitor the functioning of equipment to allow

automated recovery and to shorten downtime in maintenance. According to statistics by The Atlantic, it is expected that the investment in IoT solutions. Many other statistical reports are indicating that IoT technology has a huge potential for manufacturing and that the manufacturing industry has been the sector most impacted by IoT in the last few years

## Theoretical Analysis :

Block diagram:



MIT App Inventor x Service Details - IBM Cloud x Node-RED : praneeth1.eu-gb.my

https://praneeth1.eu-gb.mybluemix.net/red/#flow/1b4d5ef2.30e571

### Node-RED

filter nodes

Flow 1

common

- inject
- debug
- complete
- catch
- status
- link in
- link out
- comment

function

- function
- switch
- change
- range
- template

IBM IoT

connected

id

latitude

longitude

employee id

msg.payload

latitude

longitude

[get]/data

function

http

info

Search flows

- Flows
  - Flow 1
- Subflows
- Global Configuration Nodes

latitude

Node "99afc651.e7dcd8"

Type ul\_text

show more

Pressing **enter** will edit the first node in the current selection

Type here to search

27°C Haze 08:57 23-06-2021

```

iotcloud.py - C:\Users\PRANEETH\iotcloud.py (3.9.5)
File Edit Format Run Options Window Help

import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "00a0h7",
        "typeId": "Externship",
        "deviceId": "54321"
    },
    "auth": {
        "token": "12345678"
    }
}

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    employeeid=random.randint(0,100)
    latitude=random.uniform(0.0,100.0)
    longitude=random.uniform(0.0,100.0)
    myData={'d':{'employeeid':employeeid, 'latitude':latitude, 'longitude':longitude}}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()

```

Ln: 1 Col: 0

Type here to search

27°C Haze 09:04 23-06-2021

MIT App Inventor x Service Details - IBM Cloud x IBM Watson IoT Platform x Node-RED : praneeth1.eu-gb.m... x

https://00a0h7.internetofthings.ibmcloud.com/dashboard/devices/browse

### IBM Watson IoT Platform

jinukalapraneeth123@gmail.com ID: 00a0h7

Browse Action Device Types Interfaces

Add Device +

## Browse Devices

All Devices Diagnose

This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API.

Search by Device ID Device Simulator

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
> 54321	Connected	Externship	Device	Jun 16, 2021 11:44 AM	

Items per page 50 | 1-1 of 1 item 1 of 1 page < 1 >

Cookie Preferences

iotcloud.py - C:\Users\PRANEETH\iotcloud.py (3.9.5)

Service Details - IBM Cloud x IBM Watson IoT Platform x Node-RED : praneeth1.eu-gb.m... x New Tab x

https://00a0h7.internetofthings.ibmcloud.com/dashboard/devices/drilldown/Externship:54321?returnTo=/devices/browse

### IBM Watson IoT Platform

jinukalapraneeth123@gmail.com ID: 00a0h7

Back

## Device Drilldown - 54321

Connection Information

Recent Events

State

Device Information

Metadata

Diagnostics

Connection Logs

Device Actions

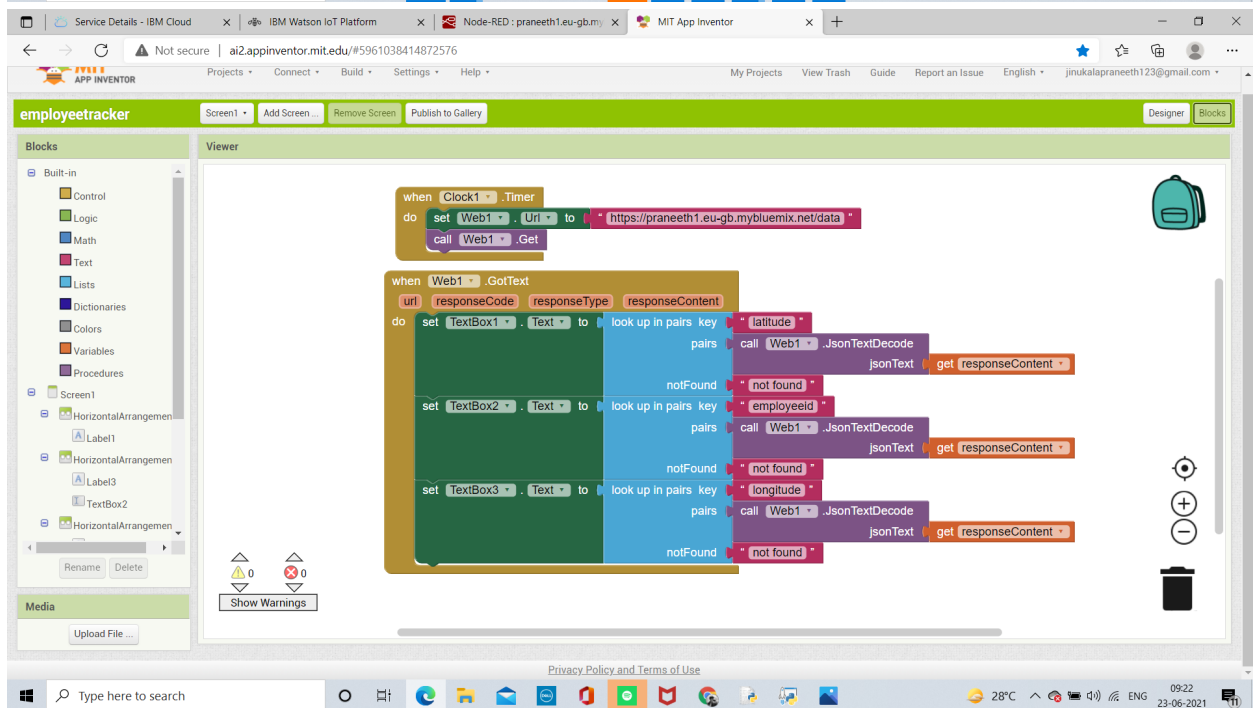
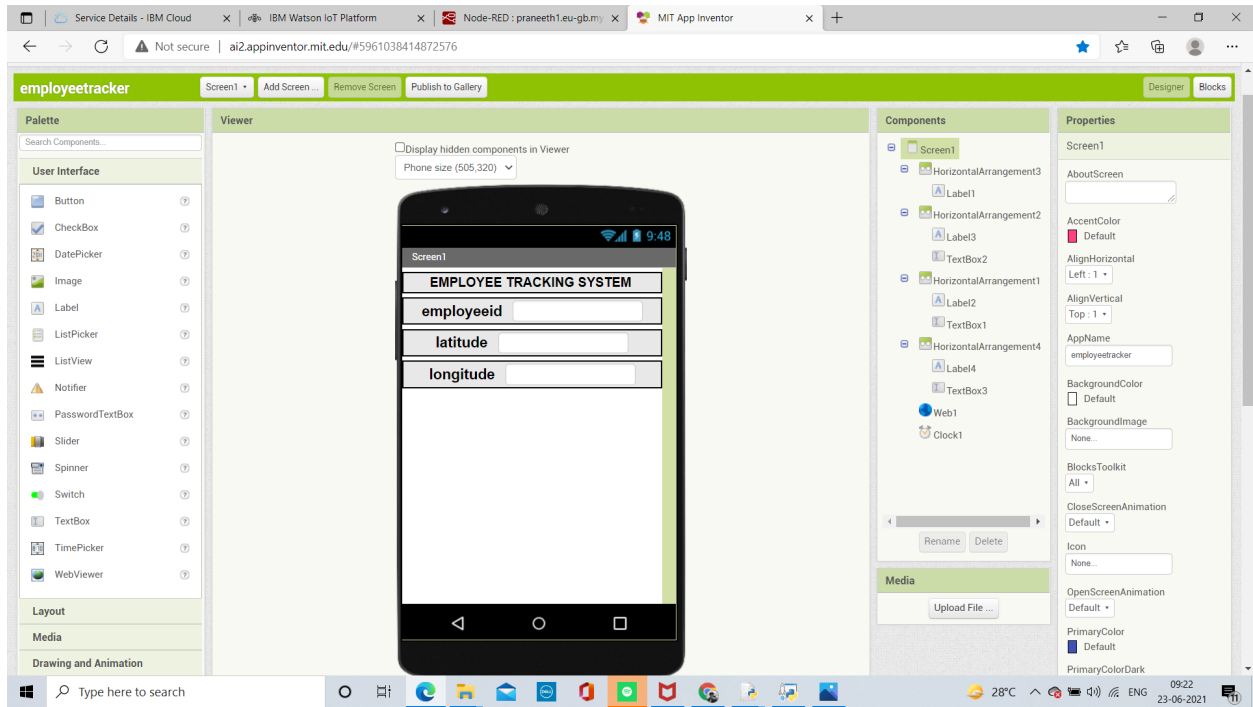
### Recent Events

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
status	{"d":{"employeeid":78,"latitude":41.292664259...	json	a few seconds ago
status	{"d":{"employeeid":85,"latitude":21.674928923...	json	a few seconds ago
status	{"d":{"employeeid":69,"latitude":43.143638504...	json	a few seconds ago
status	{"d":{"employeeid":17,"latitude":68.279928269...	json	a few seconds ago
status	{"d":{"employeeid":92,"latitude":93.264076407...	json	a few seconds ago

### State

This table shows a list of data points that are reported by this device.



## Screen1

# EMPLOYEE TRACKING SYSTEM

**employeeid**

27

**latitude**

11.25508

**longitude**

56.62586