SMART FARMER – IOT ENABLEDD SMART FARMIN GAPPLICATION

PROJECT DEVELOPMENT – DELIVERY OF SPRINT - 1

DATE	17 NOVEMBER 2022
TITLE	SMART FARMER – IOT ENABLED SMART FARMING APPLICATION
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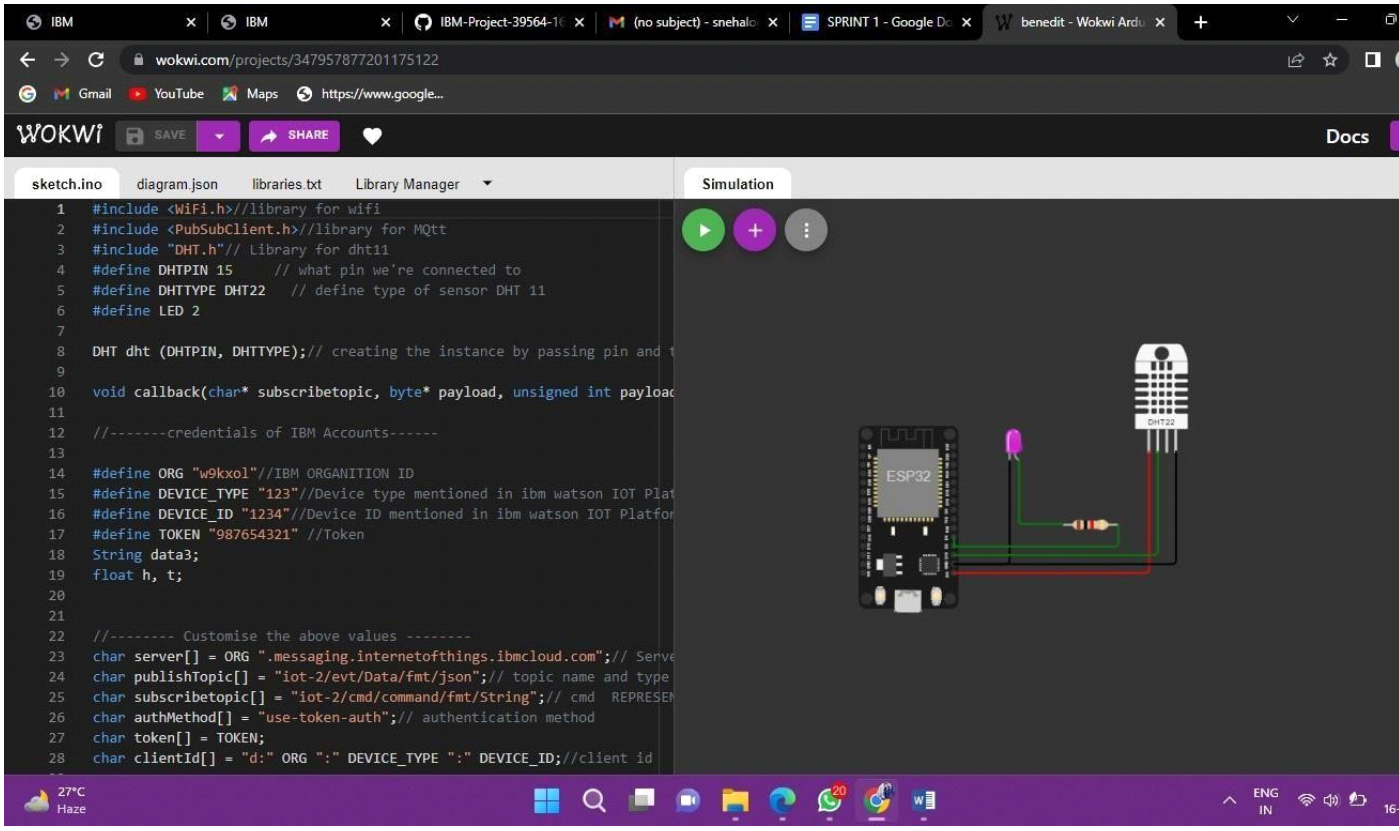
TEAM MEMBER NAME	Vijay G Ajeeth A Vasanthakumar V

Connect Sensor in ESP8266

CIRCUIT

DIAGRAM:



Develop a Python Code:

Code: import time
importsys import
ibmiotf.application
import
ibmiotf.device
import random

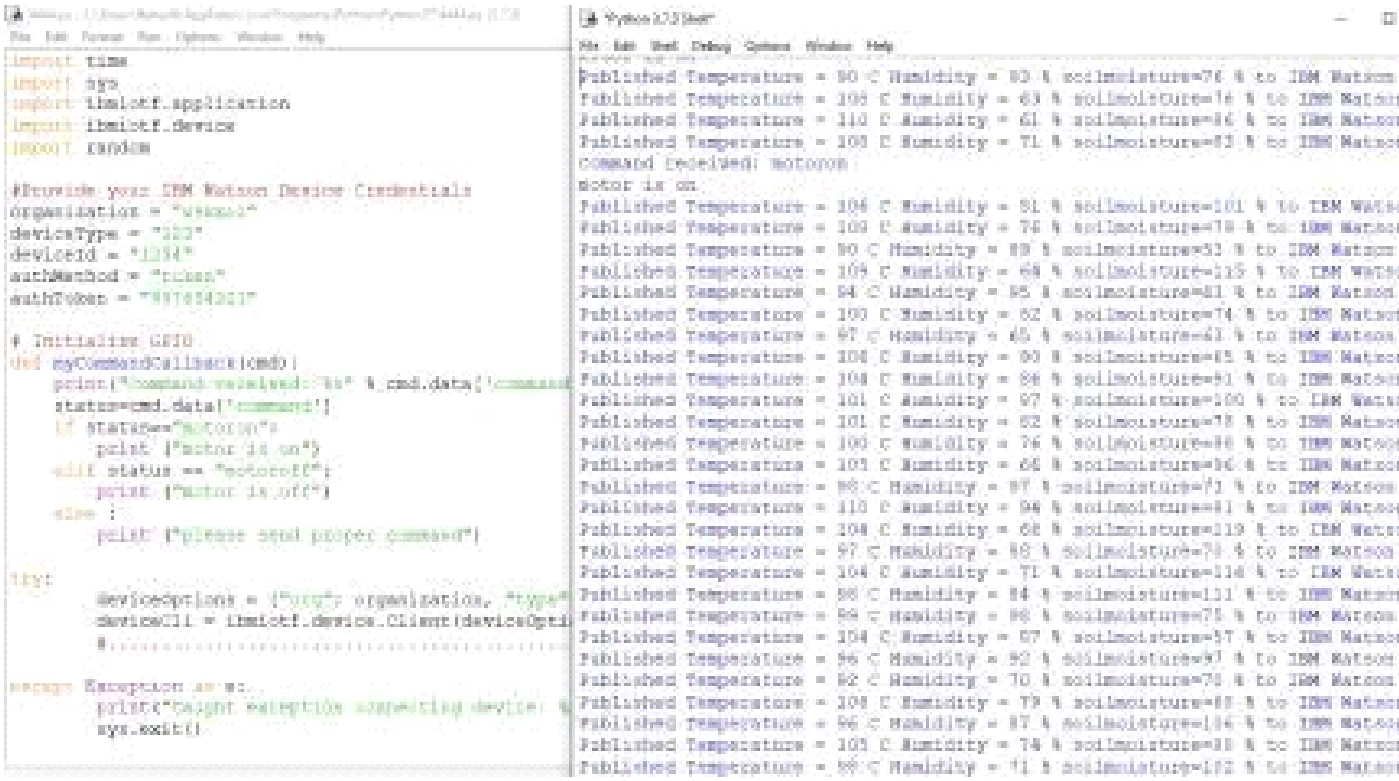
#Provide your IBM Watson Device
Credentialsorganization = "w9kxol"
deviceType = "123" deviceId = "1234"
authMethod = "token" authToken =
"987654321"

Initialize GPIO def myCommandCallback(cmd):
print("Command received: %s" %
cmd.data['command'])status=cmd.data['command']
if status=="motoron": print ("motor is

```
on")                elif status == "motoroff":          print
("motor is off")   else :
 print ("please send proper command") try:
deviceOptions = {"org": organization, "type":
deviceType, "id": deviceId, "authmethod":
authMethod, "auth-token": authToken}
deviceCli
=
        ibmiotf.device.Client(deviceOptions
        ) #
        ..... exce
        pt

    Exception as e:

print("Caught exception connecting device: %s" %
                                        str(e))
        sys.exit()

    # Connect and send a datapoint "hello" with
    value"world" into the cloud as an event of type
    "greeting" 10 times  deviceCli.connect()
    while True:
     #Get Sensor Data from DHT11

     temp=random.randint(90,110)
    Humid=random.randint(60,100)

    moist=random.randint(50,120)    data = { 'temp'
    :temp, 'Humid': Humid ,'moist':moist}
     #print data  def myOnPublishCallback():
                                            pri
    nt("Published Temperature = %s C" % temp,
    "Humidity = %s %%"
    % Humid,"soilmoisture=%s %%" %moist, "to IBM
    Watson")
```

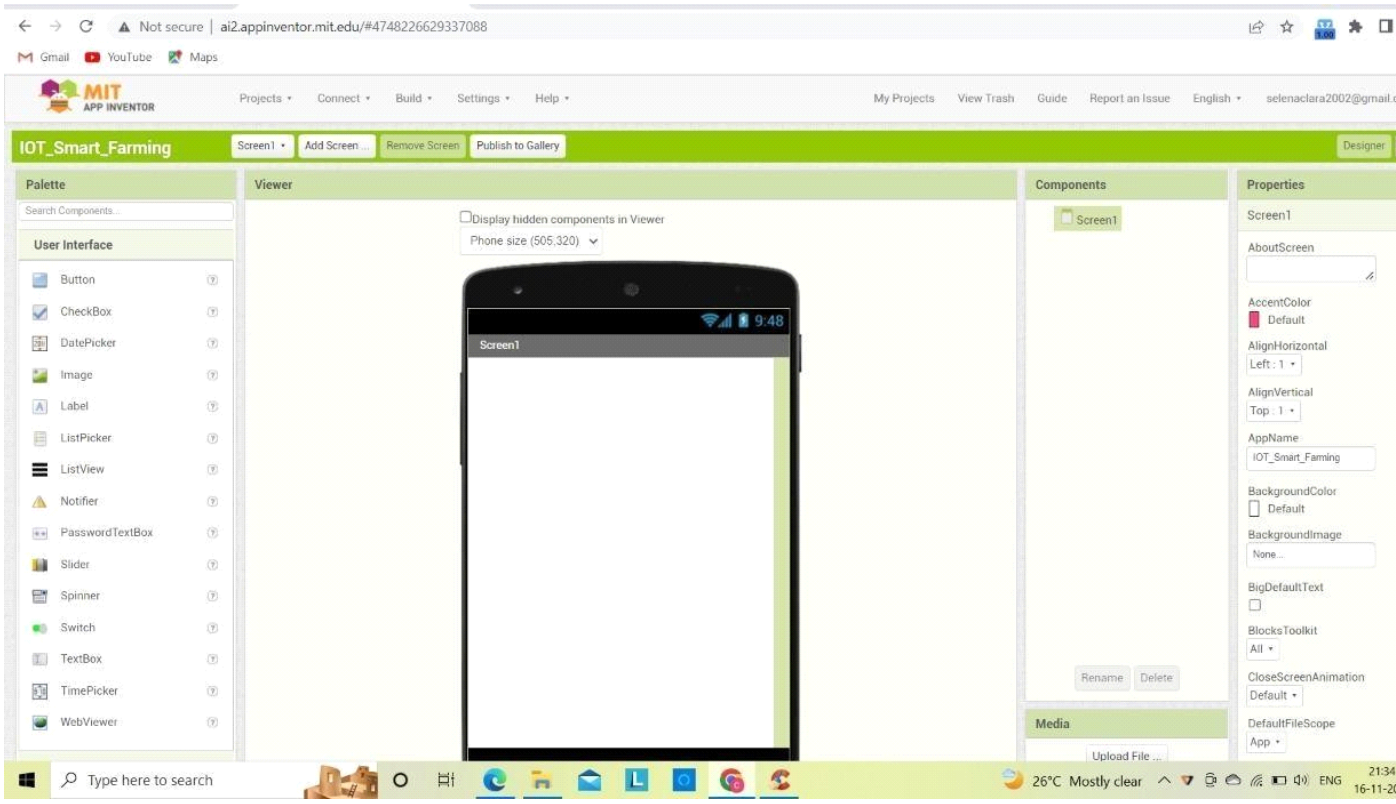
```
 success =
deviceCli.publishEvent("IoTSensor","json",
data,
qos=0,  on_publish=myOnPublishCallback
)
 if not success:    print("Not
connectedto IoTF")
time.sleep(10)


 deviceCli.commandCallback = myCommandCallback

# Disconnect the device and application from the
clouddeviceCli.disconnect()
```

OUTPUT:

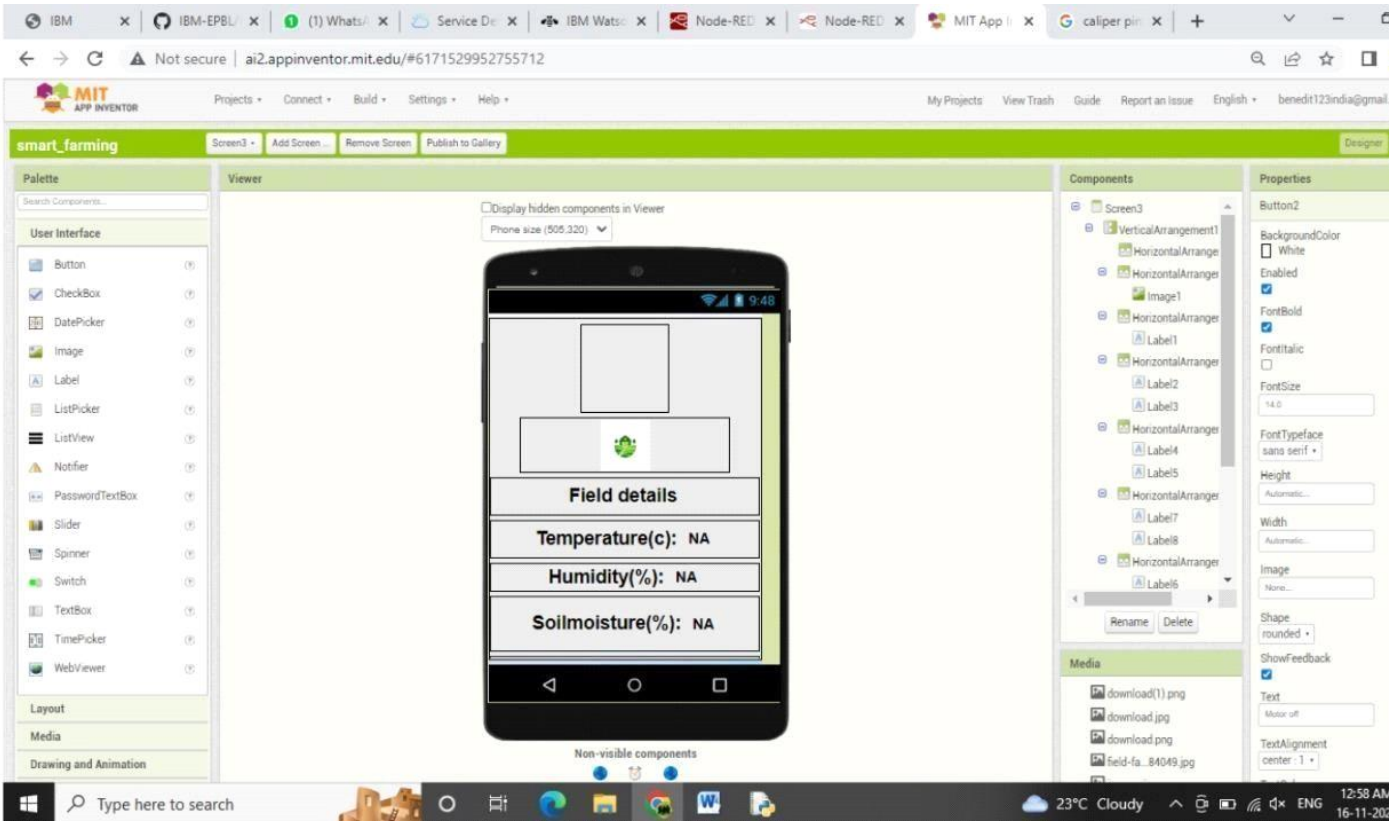


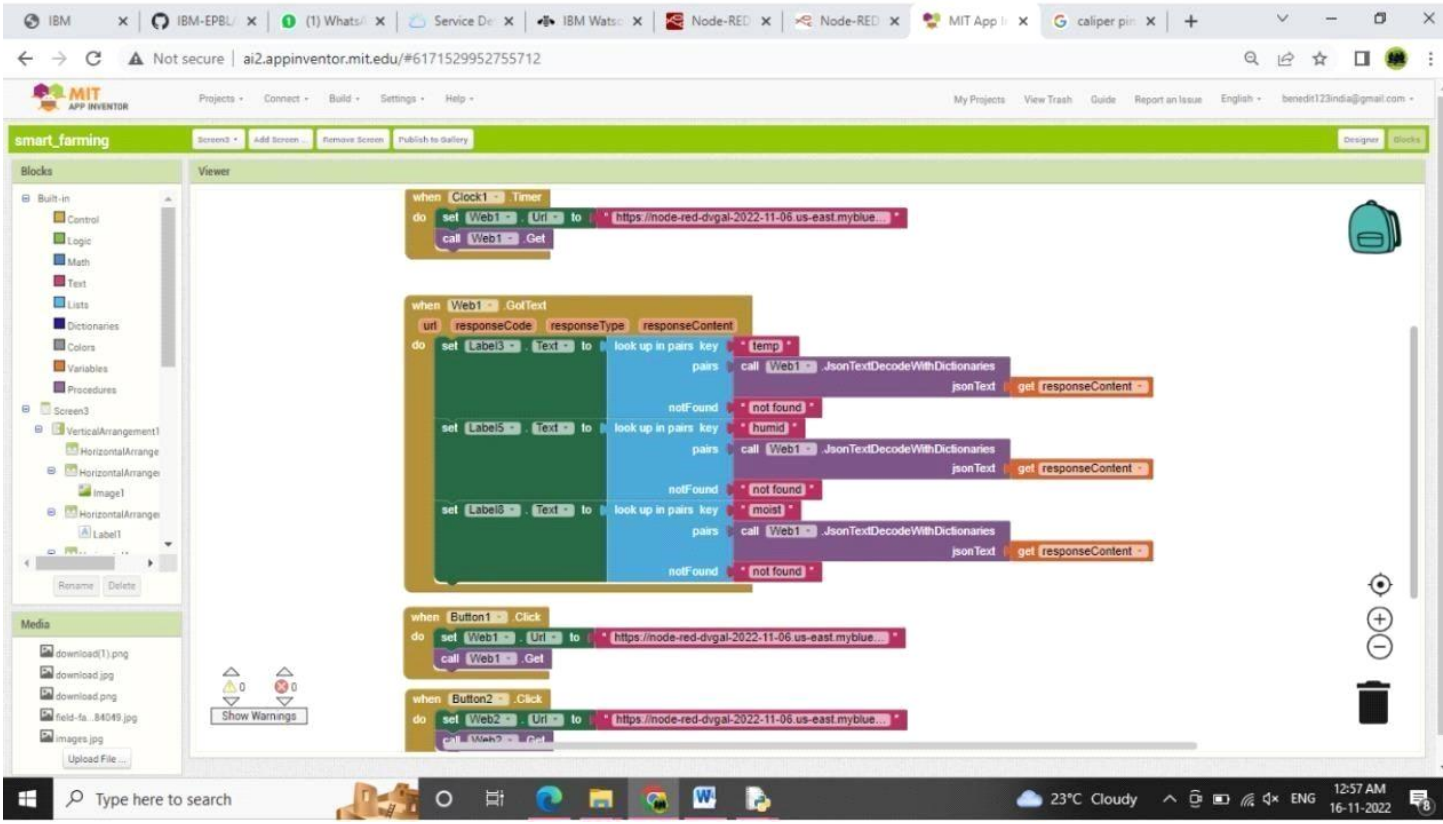
Develop an application with MIT APP

inventor:Mobile App opening page:

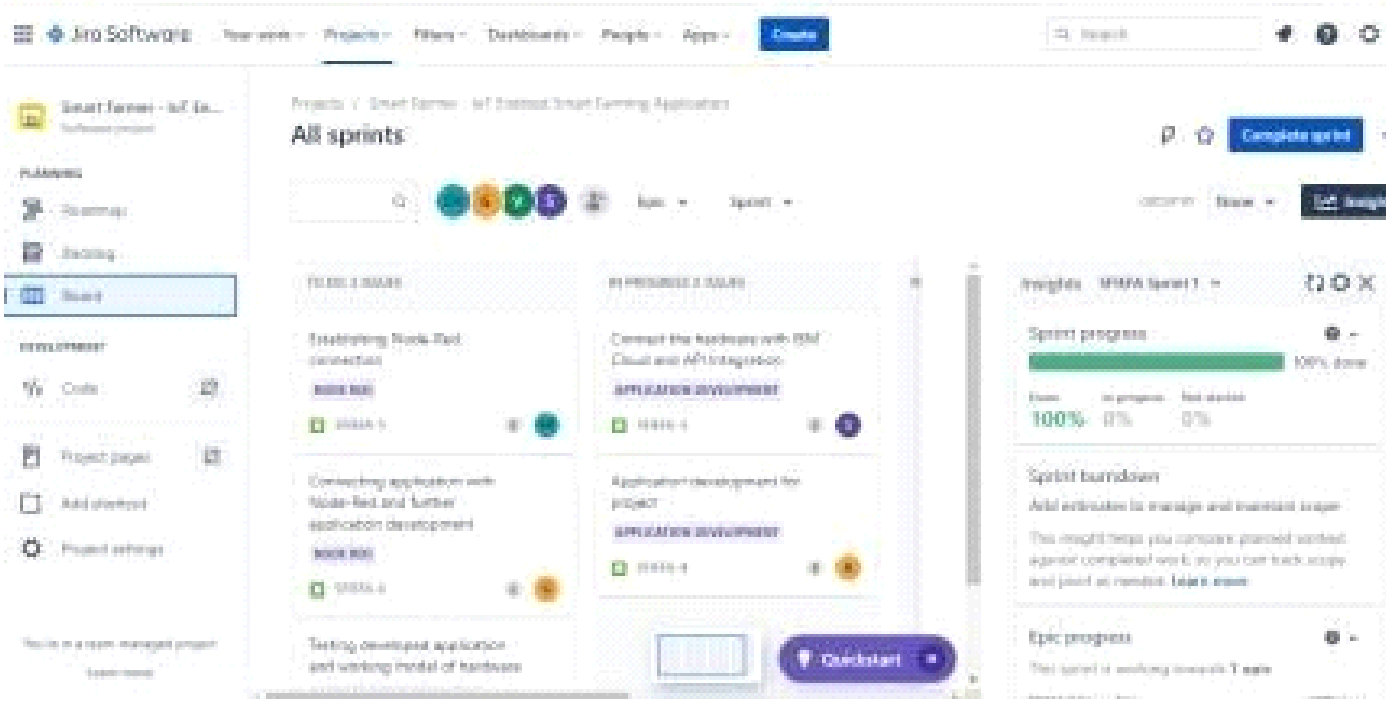


Mobile App Log in Page:


Not secure | ai2.appinventor.mit.edu/#6171529952755712
MIT APP INVENTOR
Projects
Connect
Build
Settings
Help
My Projects
View Trash
Guide
Report an Issue
English
benedit123india@gmail
smart_farming
Screen3
Add Screen ...
Remove Screen
Publish to Gallery
Designer
Palette
Search Components...
User Interface
Button
CheckBox
DatePicker
Image
Label
ListPicker
ListView
Notifier
PasswordTextBox
Slider
Spinner
Switch
TextBox
TimePicker
WebViewer
Layout
Media
Drawing and Animation
Viewer
Display hidden components in Viewer
Phone size (505,320)
9:48
Field details
Temperature(c): NA
Humidity(%): NA
Soilmoisture(%): NA
Non-visible components
Components
Screen3
VerticalArrangement1
HorizontalArrange
Image1
Label1
Label2
Label3
Label4
Label5
Label7
Label8
Label6
Rename
Delete
Media
download(1).png
download.jpg
download.png
field-fa...84049.jpg
Properties
Button2
BackgroundColor
White
Enabled
FontBold
FontItalic
FontSize
FontTypeface
sans serif
Height
Width
Image
Shape
rounded
ShowFeedback
Text
TextAlignment
center : 1
Type here to search
23°C Cloudy
ENG
12:58 AM
16-11-202



JIRA Software Sprint Planning:


Jira Software
All sprints
Complete sprint
Sprint progress
100% done
100%
Sprint burndown
Epic progress
Quickstart