

#### SPRINT 4

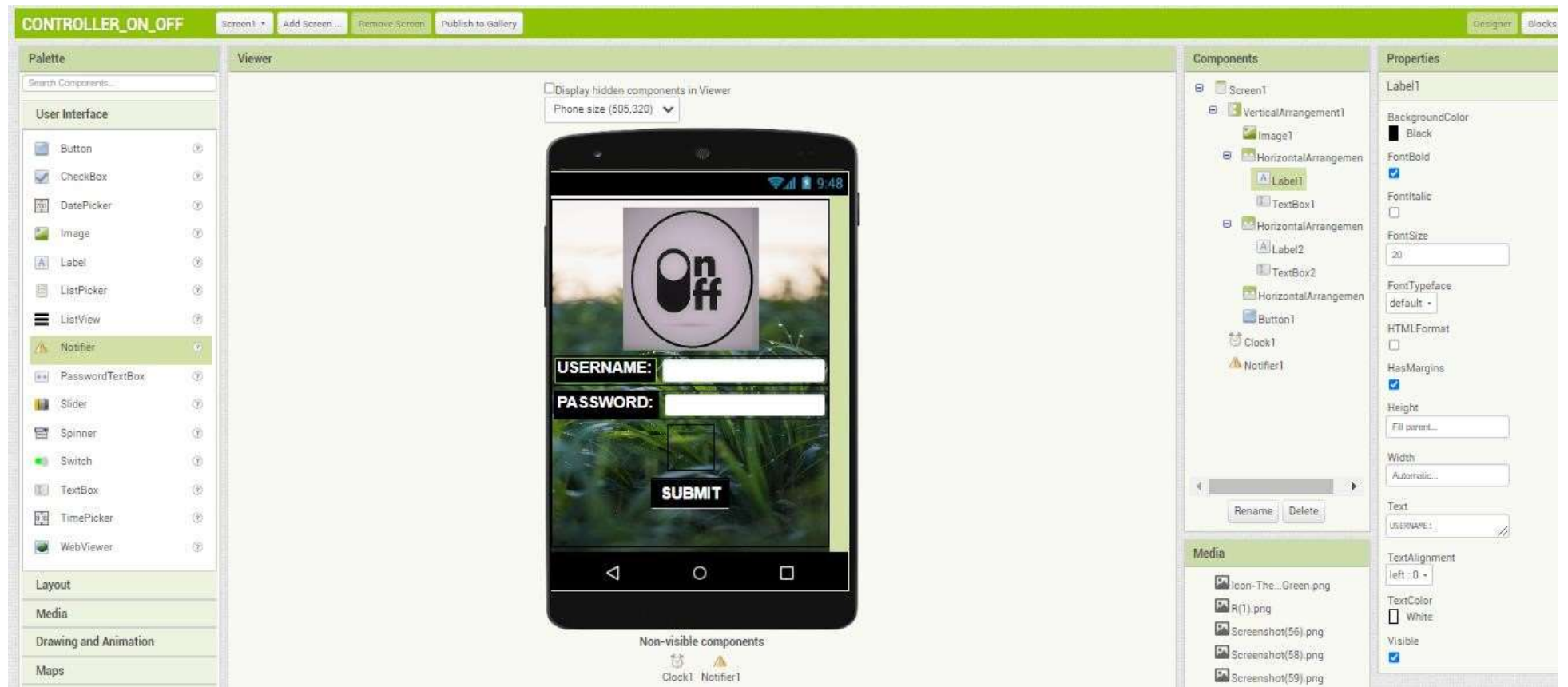
TEAM ID	PNT2022TMID41751
PROJECT TITLE	IoT- Based Smart Crop Protection System For Agriculture

#### OBJECTIVE:

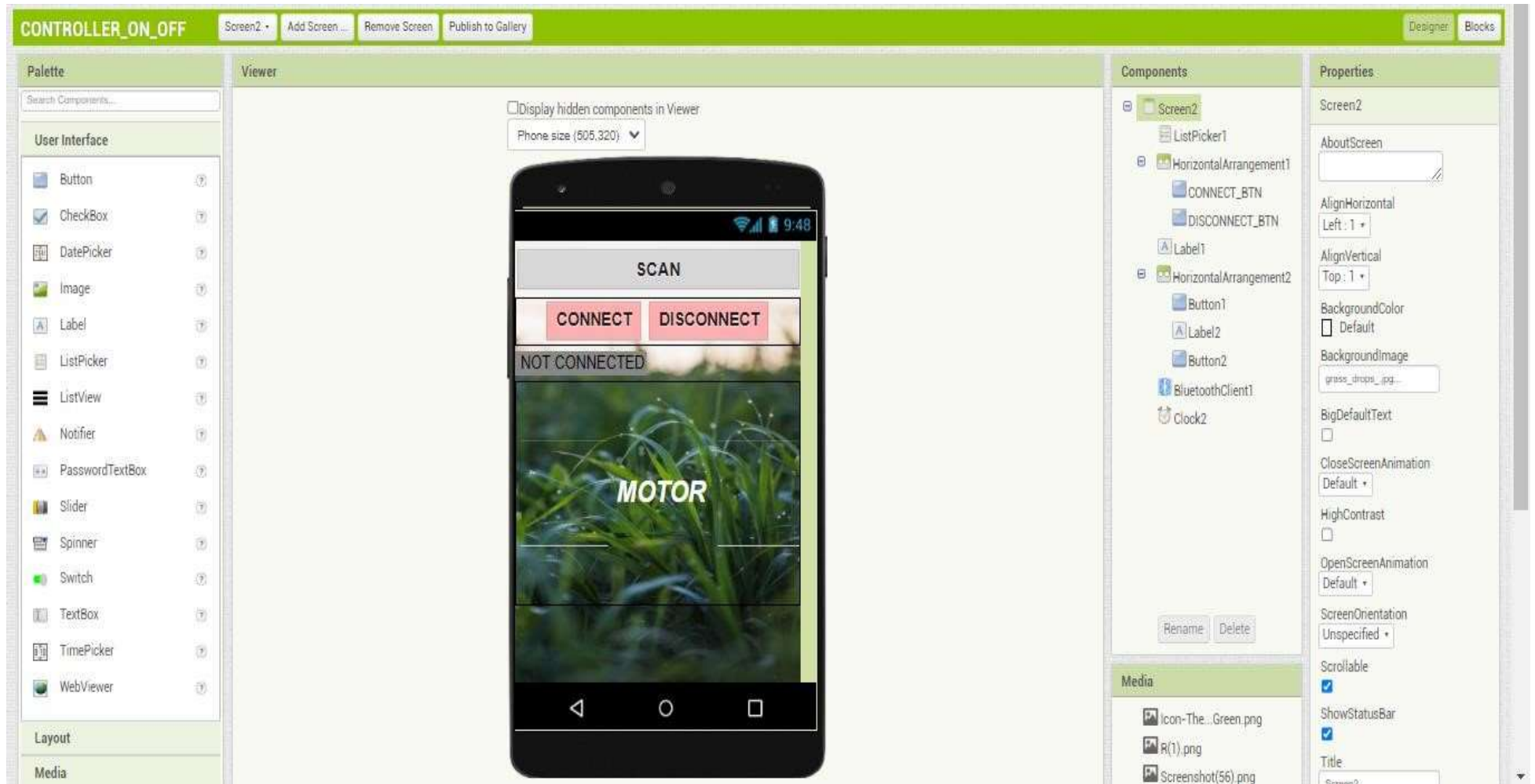
Using the MIT app inventor to create the app application to ON/OFF the motor in the field with connecting the Bluetooth module and to connect the node red with MIT app inventor and show the level of Temperature , Humidity and Soil moisture.

MIT APP INVENTOR : TO CONTROL MOTOR SYSTEM AND TO SHOW THE LEVEL OF TEMPERATURE , HUMIDITY AND SOIL MOISTURE.

# SCREEN 1:



## SCREEN 2 :



## SCREEN 3:

CONTROLLER\_ON\_OFF

Screen3Add Screen ...Remove ScreenPublish to Gallery

DesignerBlocks

Palette

Search Components...

User Interface

Button

CheckBox

DatePicker

Image

Label

ListPicker

ListView

Notifier

PasswordTextBox

Slider

Spinner

Switch

TextBox

TimePicker

WebView

Layout

Media

Drawing and Animation

Viewer

☐ Display hidden components in Viewer

Phone size (505,320)

TEMPERATURE : 37

HUMIDITY : 70

SOIL MOISTURE : 78

Non-visible components

Components

Screen3

VerticalArrangement1

VerticalArrangement2

TextBox1

VerticalArrangement3

TextBox2

VerticalArrangement4

TextBox3

Web1

Web2

Web3

Clock3

Rename

Delete

Media

Icon-The...Green.png

R(1).png

Screenshot(56).png

Screenshot(58).png

Properties

TextBox3

BackgroundColor

Default

Enabled

FontBold

FontItalic

FontSize

FontTypeface

Height

Width

Hint

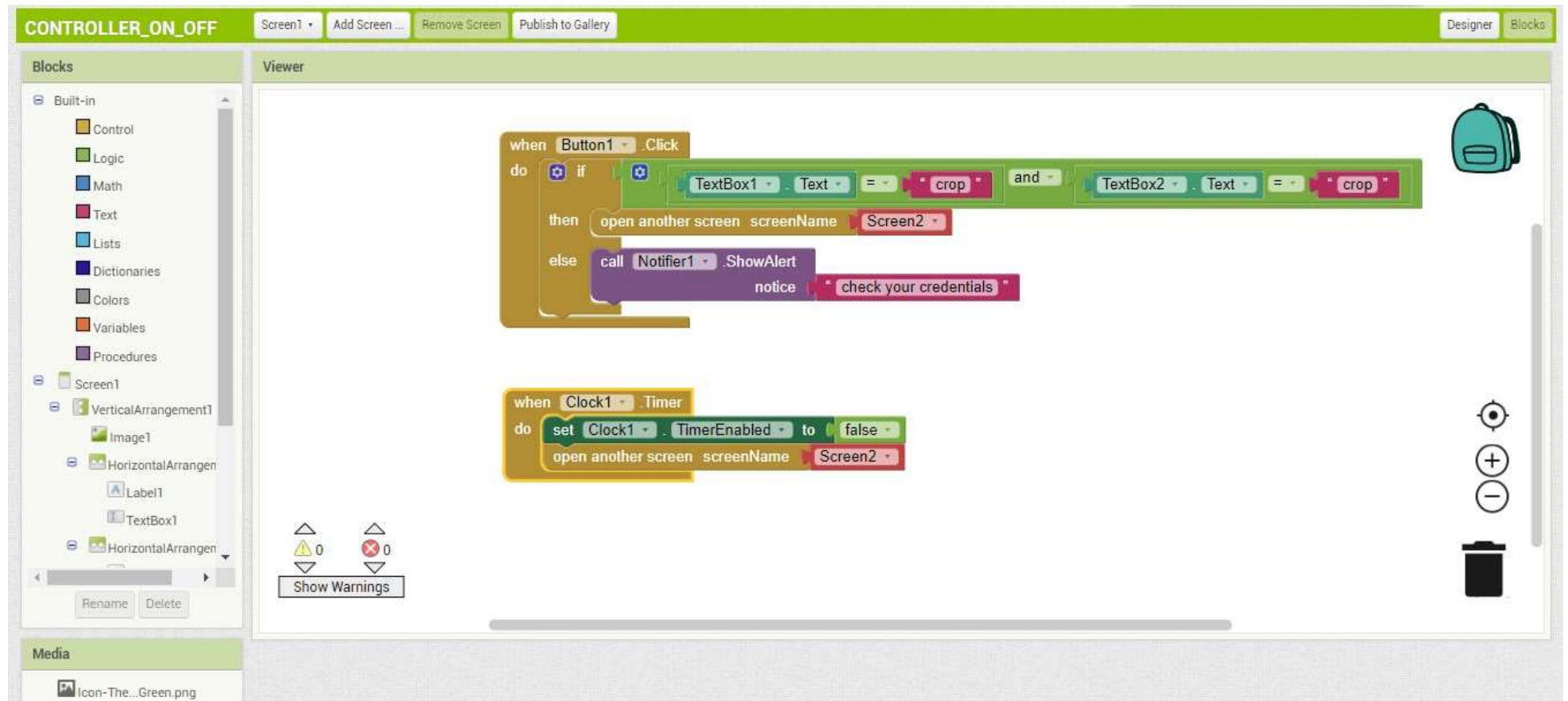
MultiLine

NumbersOnly

ReadOnly

Text

## BLOCK : SCREEN 1





## BLOCK: SCREEN 2

**CONTROLLER\_ON\_OFF** Screen2 ▾ Add Screen ... Remove Screen Publish to Gallery Designer Blocks

**Blocks**

- Built-in
  - Control
  - Logic
  - Math
  - Text
  - Lists
  - Dictionaries
  - Colors
  - Variables
  - Procedures
- Screen2
  - ListPicker1
- HorizontalArranger
  - CONNECT\_BTN
  - DISCONNECT\_BTN
  - Label1
- HorizontalArranger

**Viewer**

when ListPicker1 .BeforePicking  
do set ListPicker1 .Elements to BluetoothClient1 .AddressesAndNames

when ListPicker1 .AfterPicking  
do set Label1 .Text to "CONNECT YOUR DEVICE"

when CONNECT\_BTN .Click  
do set ListPicker1 .Selection to call BluetoothClient1 .Connect  
address ListPicker1 .Selection  
set Label1 .Text to "CONNECT"

when Button1 .Click  
do call BluetoothClient1 .SendText  
text "1"

when DISCONNECT\_BTN .Click  
do call BluetoothClient1 .Disconnect  
set Label1 .Text to "DISCONNECT"

when Button2 .Click  
do call BluetoothClient1 .SendText  
text "0"

when Clock2 .Timer  
do set Clock2 .TimerEnabled to false  
open another screen screenName Screen3

⚠ 0 ✖ 0  
Show Warnings

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## BLOCK : SCREEN 3

**CONTROLLER\_ON\_OFF** Screen3 Add Screen ... Remove Screen Publish to Gallery Designer Blocks

**Blocks**

- Built-in
  - Control
  - Logic
  - Math
  - Text
  - Lists
  - Dictionaries
  - Colors
  - Variables
  - Procedures
- Screen3
  - VerticalArrangement1
    - VerticalArrangemer
    - TextBox1
    - VerticalArrangemer
    - TextBox2
    - VerticalArrangemer

**Viewer**

when Clock3 .Timer  
do  
  set Web1 . Url to "https://node-red-uonrs-2022-11-16.eu-gb.mybluemix..."  
  call Web1 .Get

when Web1 .GotText  
  url responseCode responseType responseContent  
  do  
    set TextBox1 . Text to look up in pairs key "Temperature"  
    pairs call Web1 .JsonTextDecode jsonText get responseContent  
    notFound "not found"  
    set TextBox2 . Text to look up in pairs key "Humidity"  
    pairs call Web2 .JsonTextDecode jsonText get responseContent  
    notFound "not found"  
    set TextBox3 . Text to look up in pairs key "Soil Moisture"  
    pairs call Web1 .JsonTextDecode jsonText get responseContent  
    notFound "not found"

Show Warnings

0 0

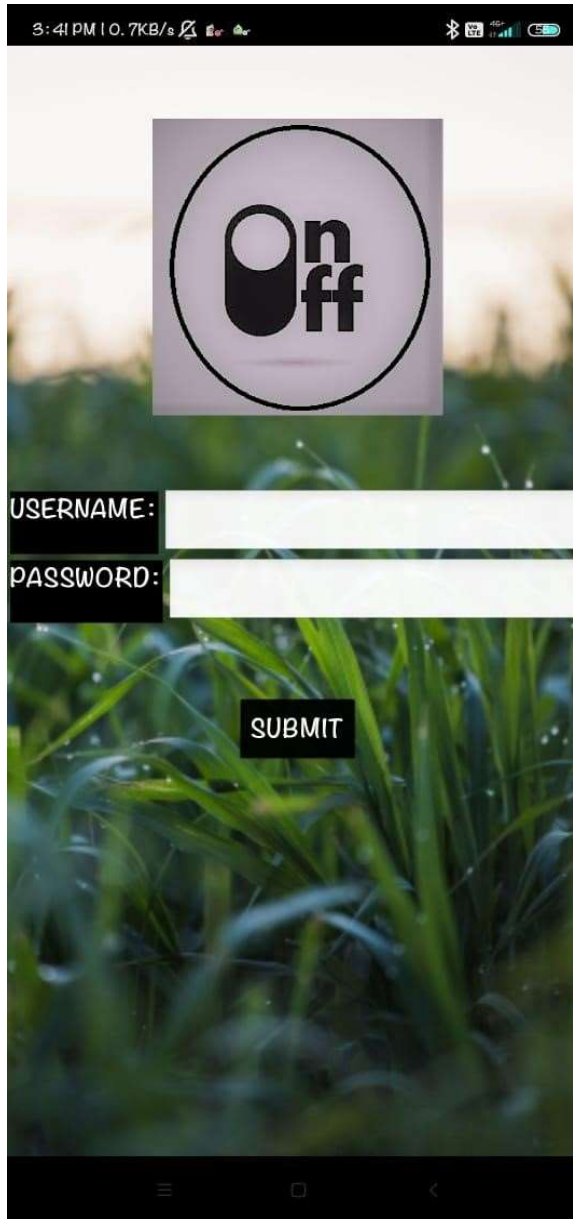
0 0

+

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0

## OUTPUT : SCREEN 1



3:41 PM | 0.7KB/s

**nff**

USERNAME:

PASSWORD:

SUBMIT



## SCREEN 2





## SCREEN 2



## SCREEN 3

