

### Develop the Web Application using Node-Red

Team ID	PNT2022TMID05290
Project Name	Smart waste management system for metropolitan cities

Step 1: In Backend NODE – RED output is fetched to MIT APP INVENTOR Step2: In MIT APP INVENTOR design the output screen layout using various toolsavailable in the platform

Step 3: Then click on connect then click on AI COMPANIONStep 4:

Scan the QR code being displayed

Step 5: To scan the code install MIT AI2 COMPANION app in your mobileStep 6:

Now scan the code and the output is shown in mobile

## **SCREENSHOTS OF MIT INVENTOR:**

**MIT WEBPAGE DESIGN WINDOW**

IBM x IBM-EPBL/ x GitHub x Google Me x WhatsApp x Node-RED x MIT App Inv x 127.0.0.1:18 x (no subject) x Node-RED x +

Not secure | ai2.appinventor.mit.edu/#6296302225588224

MIT APP INVENTOR

Projects Connect Build Settings Help My Projects View Trash Guide Report an Issue English akshayamahadevan2002@gmail.com

Smart\_Waste\_Management Screen1 Add Screen ... Remove Screen Publish to Gallery Designer Blocks

Palette

Search Components...

User Interface

- Button
- CheckBox
- DatePicker
- Image
- Label
- ListPicker
- ListView
- Notifier
- PasswordTextBox
- Slider
- Spinner
- Switch
- TextBox
- TimePicker
- WebView

Layout

Viewer

☐ Display hidden components in Viewer

Phone size (505,320)

Smart Waste Management

Monitoring layout

BIN 1

Location

Distance

Load cell

Components

- Screen1
  - HorizontalArrangemen
    - Label1
  - HorizontalArrangemen
    - TextBox2
  - HorizontalArrangemen
    - Label4
    - TextBox3
  - HorizontalArrangemen
    - Label5
    - TextBox4
  - HorizontalArrangemen
    - Label6
    - TextBox5
  - TextBox6
  - Web1
  - Web2

Media

Upload File ...

Properties

TextBox2

BackgroundColor

Gray

Enabled

☒

FontBold

☐

FontItalic

☐

FontSize

14.0

FontTypeface

default

Height

35 pixels...

Width

Fill parent...

Hint

Hint for TextBox2

MultiLine

☐

NumbersOnly

☐

ReadOnly

☐

27°C Rain off and on

Search

ENG IN

13:04 12-11-2022

**BACKEND NODE RED FLOW CONNECTION**

IBM x IBM-EPBL/ x GitHub x Google Me x WhatsApp x Node-RED x MIT App In x 127.0.0.1:18 x (no subject) x Node-RED x +

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MIT APP INVENTOR

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Smart\_Waste\_Management Screen1 Add Screen ... Remove Screen Publish to Gallery Designer Blocks

Blocks

- Built-in
  - Control
  - Logic
  - Math
  - Text
  - Lists
  - Dictionaries
  - Colors
  - Variables
  - Procedures
- Screen1
  - HorizontalArrangemen
  - Label1
  - HorizontalArrangemen
  - TextBox2
  - HorizontalArrangemen
  - Label4

Media

Upload File ...

Viewer

when Clock1 .Timer

do

- set Web1 . Url to " http://127.0.0.1:1880/sensor "
- call Web1 .Get

when Web1 .GotText

url responseCode responseType responseContent

do

- set TextBox4 . Text to look up in pairs key " dist " pairs call Web1 .JsonTextDecodeWithDictionaries jsonText get responseType
- set TextBox5 . Text to look up in pairs key " load " pairs call Web1 .JsonTextDecodeWithDictionaries jsonText get responseType
- set TextBox6 . Text to look up in pairs key " alert " pairs call Web1 .JsonTextDecodeWithDictionaries jsonText get responseType

Show Warnings

27°C Rain off and on

Search

ENG IN

13:04 12-11-2022

OR CODE

IBM x IBM-EPBL/ x GitHub x Google Me x WhatsApp x Node-RED x MIT App Inv x 127.0.0.1:18 x (no subject) x Node-RED x +

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- WebView

Layout

Viewer

Display hidden components in Viewer

Phone size (500x800)

Smart Waste Management

Location

Distance

Load cell

Connect to Companion

Launch the MIT AI2 Companion on your device and then scan the barcode or type in the code to connect for live testing of your app. [Need help finding the Companion App?](#)

QR Code

Your code is:

nvzdtb

Cancel

Components

- Screen1
  - HorizontalArrangement
    - Label1
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  - HorizontalArrangement
    - Label5
    - TextBox4
  - HorizontalArrangement
    - Label6
    - TextBox5
  - TextBox6
  - Web1
  - Web2

Rename Delete

Media

Upload File ...

Properties

TextBox2

BackgroundColor

Gray

Enabled

☒

FontBold

☐

FontItalic

☐

FontSize

14.0

FontTypeface

default

Height

35 pixels...

Width

Fill parent...

Hint

Hint for TextBox2

MultiLine

☐

NumbersOnly

☐

ReadOnly

☐

27°C Rain off and on

Search

ENG IN

12:56 12-11-2022

OUTPUTS IN MOBILE

12:48

Vol

LTE1

58%

Smart Waste Management

Monitoring layout

BIN 1

Location

Chennai - MMDA

Distance

12

Load cell

15

NEED BIN CHANGE !!!!

12:50

VoLTE1

58%

Smart Waste Management

Monitoring layout

BIN 2

Location

Chennai - valapalini

Distance

40

Load cell

10

NO NEED TO COLLECT RIGHT NOW

III

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