

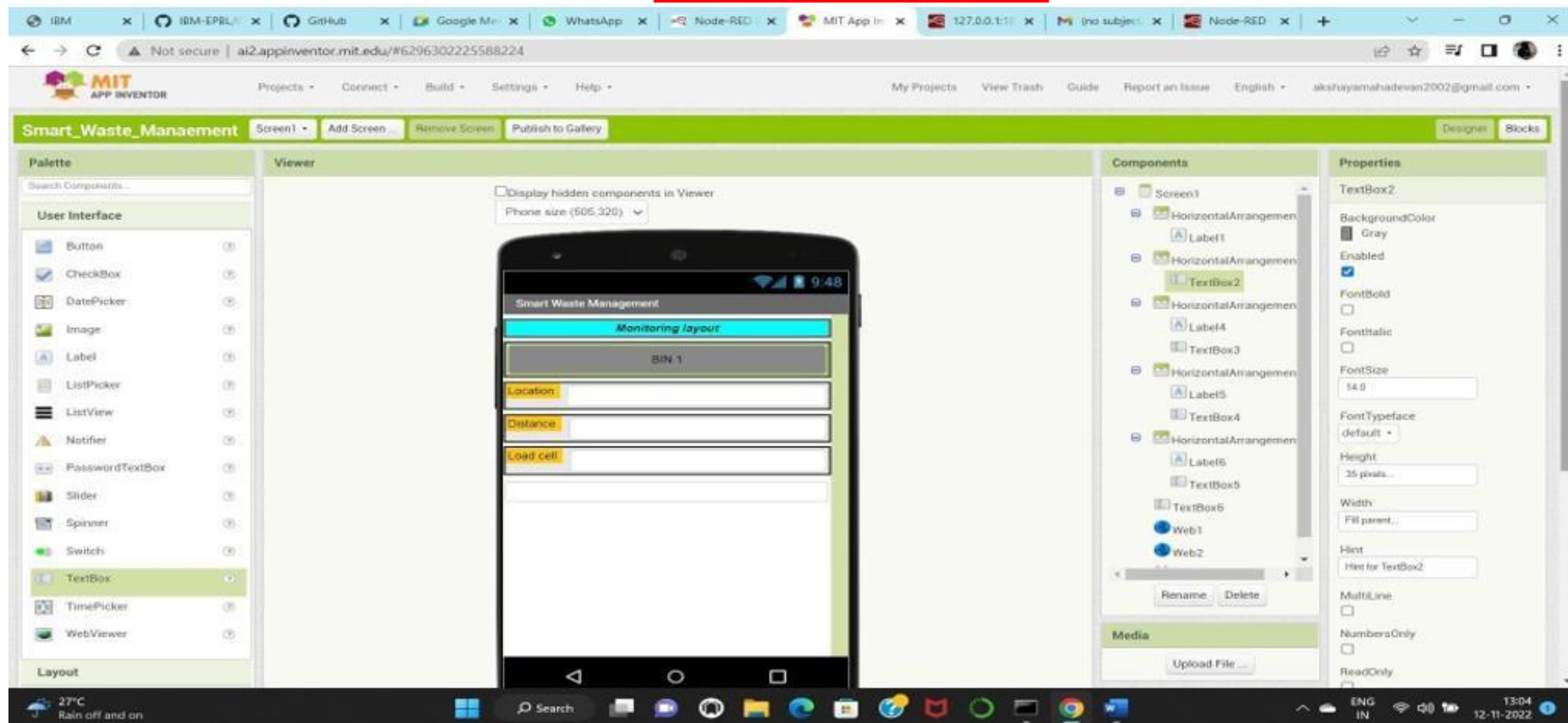
## Project Development Phase Sprint 4

Date	8 November 2022
Team ID	PNT2022TMID00354
Project Name	Smart waste management system for metropolitan cities
Maximum Marks	8 Marks

### Publishing Data to IBM cloud:

In sprint 4 we have created web application in MIT APP INVENTOR using NODE RED FLOWS in the backend and web interface in designed as per need. Output is seen is mobile by scanning the code generated by MIT APP INVENTOR.

### MIT WEBPAGE DESIGN WINDOW



## BACKEND NODE RED FLOW CONNECTION

The screenshot displays the MIT App Inventor web interface for a project named "Smart\_Waste\_Management". The interface is divided into several sections:

- Top Bar:** Includes the MIT App Inventor logo, navigation links (Projects, Connect, Build, Settings, Help), and user information (My Projects, View Trash, Guide, Report an Issue, English, and email).
- Project Bar:** Shows the project name "Smart\_Waste\_Management", a dropdown for "Screen1", and buttons for "Add Screen...", "Remove Screen", and "Publish to Gallery".
- Blocks Panel:** Located on the left, it lists various built-in blocks categorized by type (Control, Logic, Math, Text, Lists, Dictionaries, Colors, Variables, Procedures) and specific components for the current screen (HorizontalArrangement, Label1, TextBox2, Label4).
- Viewer:** The central workspace showing the visual representation of the app. It features a "Show Warnings" icon at the bottom left and a "Designer" button at the top right.
- Flowchart:** The main logic flow is as follows:
  - when Clock1.Timer** block triggers a **do** loop containing:
    - set Web1.Url to** "http://127.0.0.1:1880/sensor"
    - call Web1.Get** block
  - when Web1.GotText** block triggers a **do** loop with three parallel processing paths:
    - set TextBox4.Text to** "look up in pairs key" (key: "dist")
      - pairs** block calls **Web1.JsonTextDecodeWithDictionaries** with **jsonText** from **get responseType**.
      - notFound** block displays "not found".
    - set TextBox5.Text to** "look up in pairs key" (key: "load")
      - pairs** block calls **Web1.JsonTextDecodeWithDictionaries** with **jsonText** from **get responseType**.
      - notFound** block displays "not found".
    - set TextBox6.Text to** "look up in pairs key" (key: "alert")
      - pairs** block calls **Web1.JsonTextDecodeWithDictionaries** with **jsonText** from **get responseType**.
      - notFound** block displays "not found".

The bottom of the image shows a Windows taskbar with the date and time as 13:04 on 12-11-2022, and system status icons for weather (27°C, Rain off and on), search, and network connectivity.

## QR CODE

IBM x IBM-EPBL x GitHub x Google Me x WhatsApp x Node-RED x MIT App In x 127.0.0.1:1 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\_Managemet 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 (100%)

Smart Waste


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?](#)



Your code is:  
nvzdtb

Cancel

Components

- Screen1
  - HorizontalArrangement
    - Label1
    - HorizontalArrangement
      - TextBox2
    - HorizontalArrangement
      - Label4
      - TextBox3
    - 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  Vo9 LTE1 58% 


Smart Waste Management

**Monitoring layout**

BIN 1

Location	Chennai - MMDA
Distance	12
Load cell	15

NEED BIN CHANGE !!!!



12:50

Vol 58%

## Smart Waste Management

### Monitoring layout

BIN 2

Location Chennai - valapalini

Distance 40

Load cell 10

NO NEED TO COLLECT RIGHT NOW