

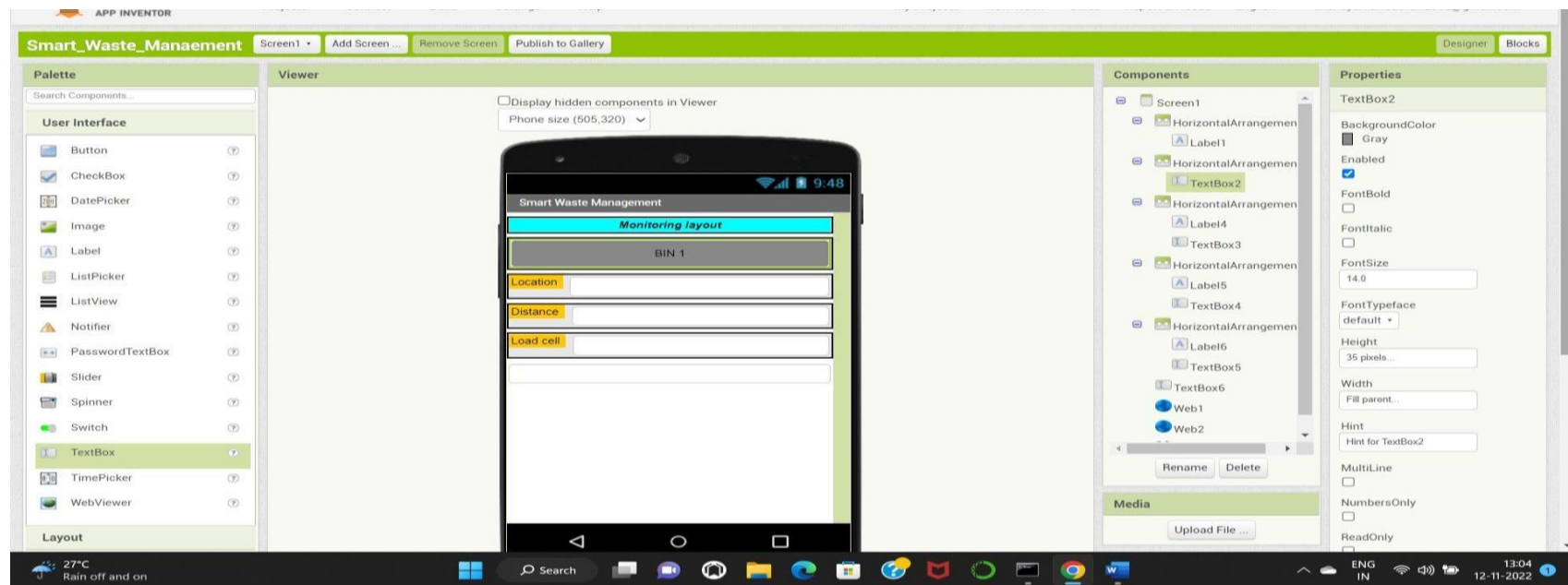
PROJECT DEVELOPMENT PHASE
SPRINT 4

Team ID	PNT2022TMID04593
Project Name	Smart waste management system for metropolitan cities
Maximum marks	8 marks

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

SCREENSHOTS OF MIT INVENTOR:

MIT WEBPAGE DESIGN WINDOW



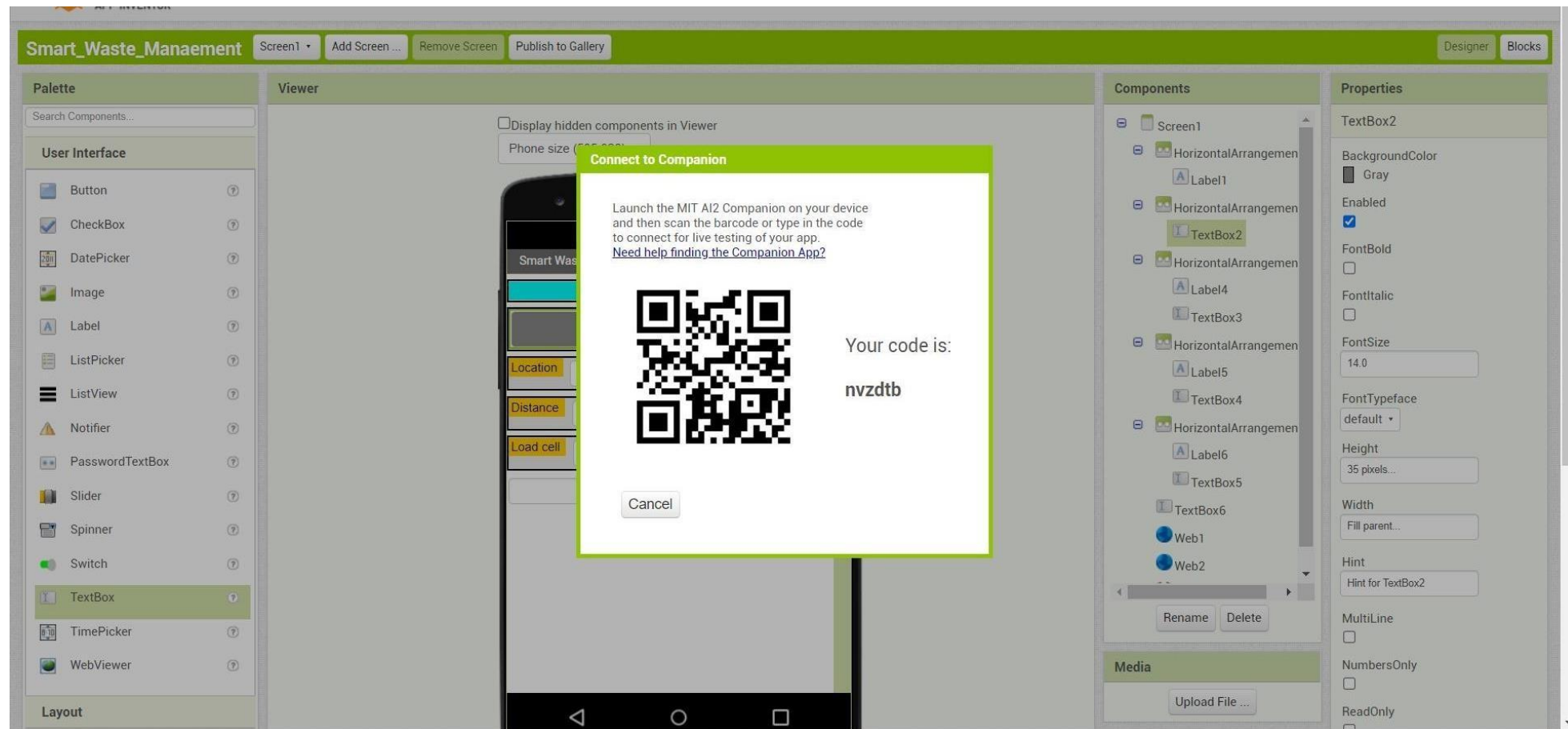
BACKEND NODE RED FLOW CONNECTION

The screenshot displays the App Inventor IDE interface for a project titled "Smart_Waste_Management". The interface is divided into several sections:

- Top Bar:** Includes the project name "Smart_Waste_Management", a "Screen1" dropdown, and buttons for "Add Screen...", "Remove Screen", and "Publish to Gallery". On the right, there are "Designer" and "Blocks" tabs.
- Left Panel (Blocks):** Contains a "Built-in" category with sub-categories like Control, Logic, Math, Text, Lists, Dictionaries, Colors, Variables, and Procedures. Below this is a "Screen1" category with components like HorizontalArrangemen, Label1, TextBox2, and Label4. At the bottom of the left panel is a "Media" section with an "Upload File ..." button.
- Center Panel (Viewer):** Shows a Node-RED flow diagram. The flow starts with a "when Clock1.Timer" block, followed by a "do" block containing "set Web1.Url to" and "call Web1.Get". Below this is another "when Web1.GotText" block. This block has a "do" section with three parallel processing steps, each involving a "look up in pairs" block, a "call Web1.JsonTextDecodeWithDictionaries" block, and a "get responseType" block. The "look up in pairs" blocks are configured with keys "dist", "load", and "alert". The "call" blocks are configured with "jsonText" and "get responseType". The "get" blocks are configured with "responseType".
- Right Panel:** Features a "Designer" tab, a "Blocks" tab, and a "Show Warnings" button. It also includes a "Backpack" icon and a "Show Warnings" button.

```
graph TD
    Clock1[when Clock1.Timer] --> Do1[do]
    Do1 --> SetWeb1[set Web1.Url to "http://127.0.0.1:1880/sensor"]
    Do1 --> CallWeb1[call Web1.Get]
    CallWeb1 --> Web1GotText[when Web1.GotText]
    Web1GotText --> Do2[do]
    Do2 --> LookUp1[look up in pairs key "dist"]
    LookUp1 --> Call1[call Web1.JsonTextDecodeWithDictionaries]
    Call1 --> Get1[get responseType]
    Do2 --> LookUp2[look up in pairs key "load"]
    LookUp2 --> Call2[call Web1.JsonTextDecodeWithDictionaries]
    Call2 --> Get2[get responseType]
    Do2 --> LookUp3[look up in pairs key "alert"]
    LookUp3 --> Call3[call Web1.JsonTextDecodeWithDictionaries]
    Call3 --> Get3[get responseType]
```

OR CODE



OUTPUTS IN MOBILE

Smart Waste Management		Smart Waste Management	
Monitoring layout		Monitoring layout	
BIN 1		BIN 2	
Location	Chennai - MMDA	Location	Chennai - valapalini
Distance	12	Distance	40
Load cell	15	Load cell	10
NEED BIN CHANGE !!!!		NO NEED TO COLLECT RIGHT NOW	

