

Develop the Web Application using Node-Red

Team ID	PNT2022TMID21827
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 tools available in the platform

Step 3: Then click on connect then click on AI COMPANION

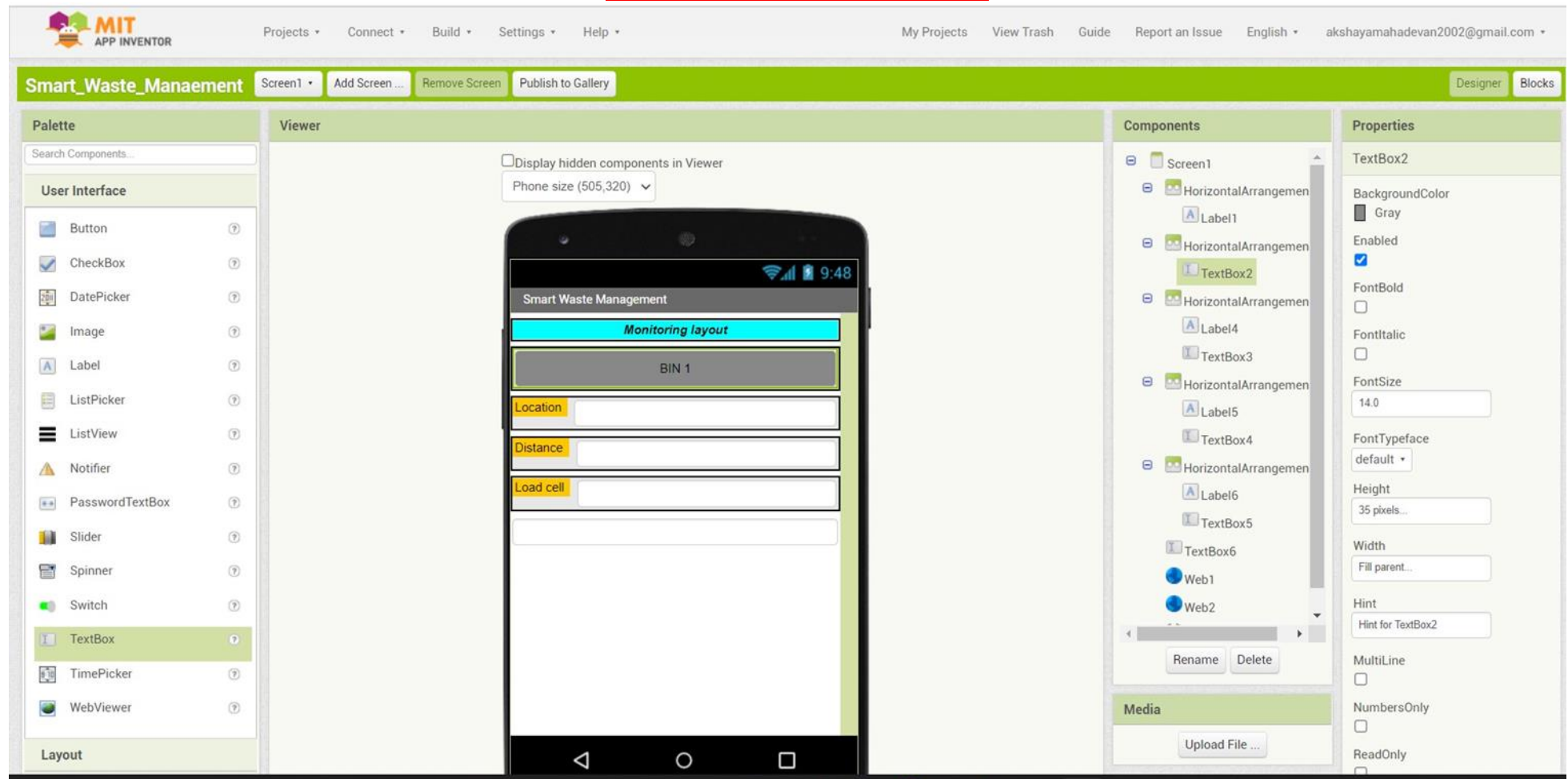
Step 4: Scan the QR code being displayed

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

Step 6: Now scan the code and the output is shown in mobile

SCREENSHOTS OF MIT 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 includes a top navigation bar with menus like Projects, Connect, Build, Settings, and Help. Below this is a sub-header with buttons for Screen1, Add Screen..., Remove Screen, and Publish to Gallery, along with Designer and Blocks tabs.

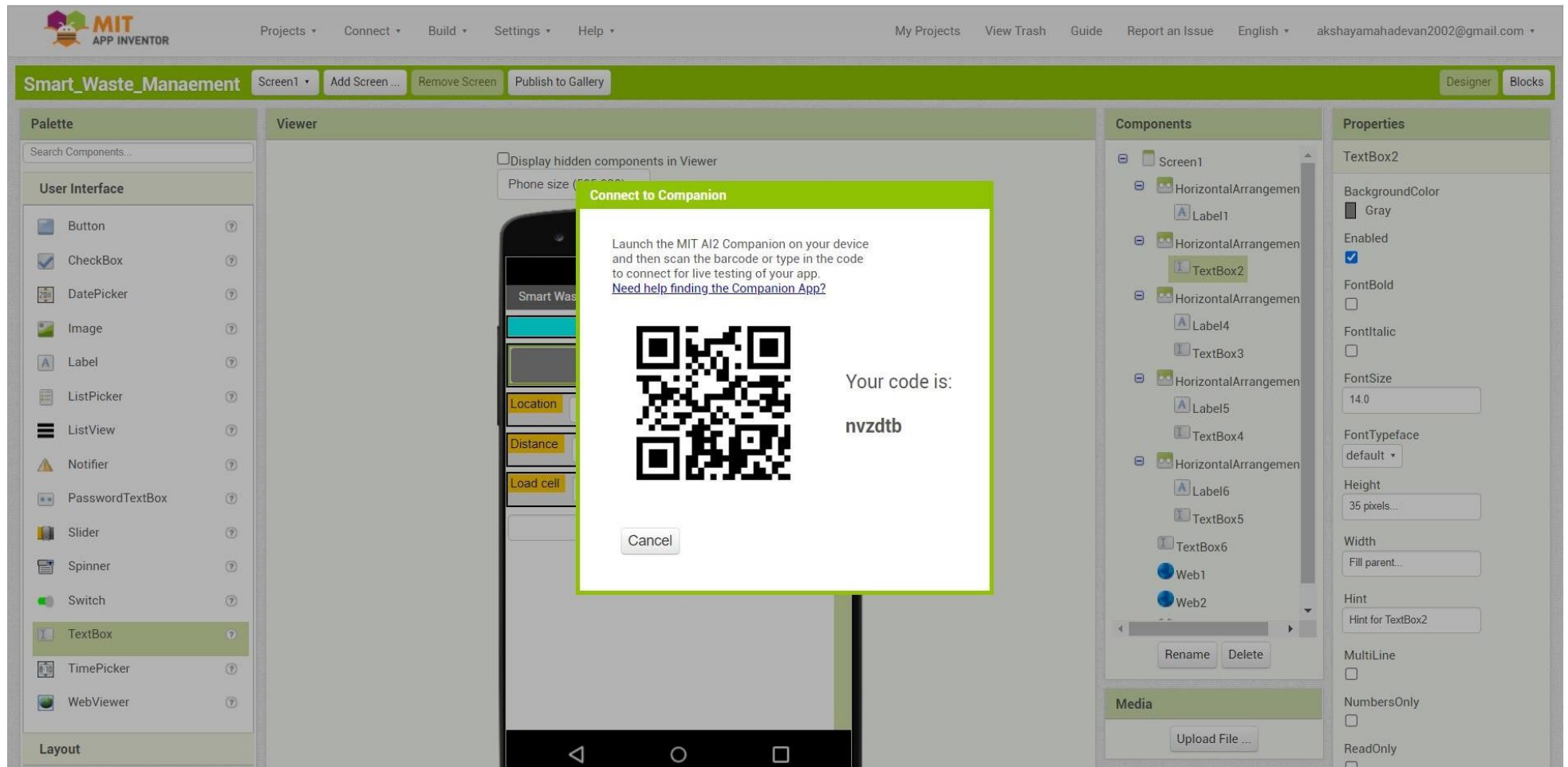
The left sidebar contains a "Blocks" panel with categories: Built-in (Control, Logic, Math, Text, Lists, Dictionaries, Colors, Variables, Procedures), Screen1, and Media. The "Screen1" category is expanded, showing components like HorizontalArrangement, Label1, TextBox2, and Label4.

The main "Viewer" area shows a visual programming flow:

- A "when Clock1.Timer" block triggers a "do" block containing:
 - "set Web1.Url to 'http://127.0.0.1:1880/sensor'"
 - "call Web1.Get"
- A "when Web1.GotText" block triggers a "do" block with three parallel processing paths:
 - Path 1:** "set TextBox4.Text to look up in pairs key 'dist'" followed by "pairs call Web1.JsonTextDecodeWithDictionaries", "jsonText get responseType", and "notFound 'not found'".
 - Path 2:** "set TextBox5.Text to look up in pairs key 'load'" followed by "pairs call Web1.JsonTextDecodeWithDictionaries", "jsonText get responseType", and "notFound 'not found'".
 - Path 3:** "set TextBox6.Text to look up in pairs key 'alert'" followed by "pairs call Web1.JsonTextDecodeWithDictionaries", "jsonText get responseType", and "notFound 'not found'".

At the bottom left of the viewer, there are warning indicators (0 warnings) and a "Show Warnings" button. On the right side of the viewer, there are icons for a backpack, a target, zoom in (+), zoom out (-), and a trash can.

OR CODE



OUTPUTS IN MOBILE

12:48

VoLTE1 58%

Smart Waste Management

Monitoring layout

BIN 1

Location

Chennai - MMDA

Distance

12

Load cell

15

NEED BIN CHANGE !!!!

III

O

<

12:50

Vodafone LTE1

58%

Smart Waste Management

Monitoring layout

BIN 2

Location

Chennai - valapalini

Distance

40

Load cell

10

NO NEED TO COLLECT RIGHT NOW

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