

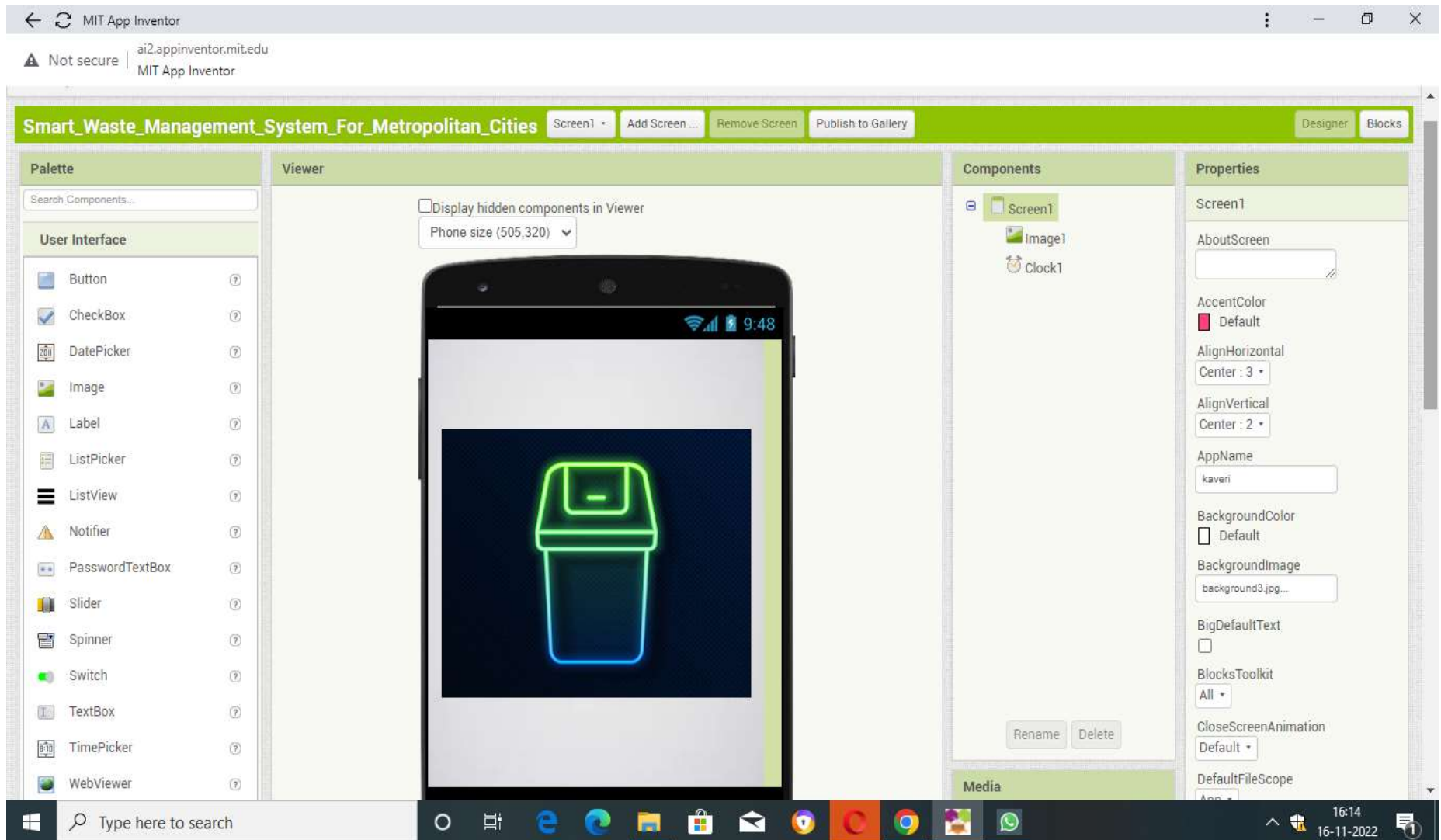
# **Smart Waste Management System for Metropolitan Cities**

**PNT2022TMID33826**

**SPRINT-III**

**MIT APP**

# SCREEN 1- FRONT END OF DEVELOPEMENT OF OPEN SCREEN



## BACK END DEVELOPMENT OF OPEN SCREEN

The screenshot displays the MIT App Inventor web interface in a browser window. The address bar shows the URL `ai2.appinventor.mit.edu`. The page title is "MIT APP INVENTOR". The navigation bar includes links for "Projects", "Connect", "Build", "Settings", "Help", "My Projects", "View Trash", "Guide", "Report an Issue", "English", and a user profile "kaverim0807@gmail.com".

The main workspace is titled "Smart\_Waste\_Management\_System\_For\_Metropolitan\_Cities". It features a "Screen1" dropdown, "Add Screen", "Remove Screen", and "Publish to Gallery" buttons. The "Designer" and "Blocks" tabs are visible at the top right of the workspace.

The "Blocks" panel on the left lists various components under "Built-in": Control, Logic, Math, Text, Lists, Dictionaries, Colors, Variables, Procedures, and "Screen1". Under "Screen1", there are "Image1" and "Clock1". At the bottom of the "Blocks" panel is "Any component".

The "Viewer" panel on the right shows a visual representation of the app screen. It contains a teal backpack icon in the top right corner, a black trash can icon in the bottom right corner, and a "Show Warnings" button in the bottom left corner. The "Clock1" component is visible in the bottom left corner of the viewer.

The "Code" panel in the center shows a script for the "Clock1" timer:

```
when Clock1.Timer
do
  set Clock1.TimerEnabled to false
  open another screen screenName Screen2
```

# FRONT END DEVELOPMENT OF LOG IN PAGE

The screenshot displays the MIT App Inventor web interface for developing a mobile application. The browser address bar shows the URL `ai2.appinventor.mit.edu` and the page title is "MIT App Inventor". The application being developed is titled "Smart\_Waste\_Management\_System\_For\_Metropolitan\_Cities".

The interface is divided into several panels:

- Palette:** Located on the left, it contains a search bar and a list of user interface components under the "User Interface" category, including Button, CheckBox, DatePicker, Image, Label, ListPicker, ListView, Notifier, PasswordTextBox, Slider, Spinner, Switch, TextBox, TimePicker, and WebViewer.
- Viewer:** The central area shows a mobile phone simulator. The screen has a green background with a white grid pattern. It displays a login form with the following elements:
  - A "Log In" button at the top.
  - A "User Name" label followed by a text input field.
  - A "Pass Word" label followed by a password input field (masked with dots).
  - A "Submit" button at the bottom.
- Components:** Located on the right, it shows a hierarchical tree of the app's components. The root is "Screen2", which contains:
  - "VerticalArrangement1" containing "HorizontalArrangement1" (with "Label3") and "HorizontalArrangement2" (with "Label1" and "TextBox1").
  - "HorizontalArrangement3" containing "Label2" and "PasswordTextBox1".
  - "HorizontalArrangement4" containing "Button1" and "Notifier1".
- Properties:** The rightmost panel shows the properties for the selected "Screen2". Properties include:
  - `AboutScreen`: A text input field.
  - `AlignHorizontal`: Set to "Center : 3".
  - `AlignVertical`: Set to "Center : 2".
  - `BackgroundColor`: Set to "Default".
  - `BackgroundImage`: Set to "green-abstract-2.jpg...".
  - `BigDefaultText`: A checkbox (unchecked).
  - `CloseScreenAnimation`: Set to "Default".
  - `HighContrast`: A checkbox (unchecked).
  - `OpenScreenAnimation`: Set to "Default".
  - `ScreenOrientation`: Set to "Portrait".
  - `Scrollable`: A checkbox (checked).
  - `ShowStatusBar`: A checkbox (checked).

The Windows taskbar at the bottom shows the system clock as 16:14 on 16-11-2022, along with various application icons.

# BACK END DEVELOPMENT OF LOGIN PAGE

The screenshot displays the MIT App Inventor web interface. The browser address bar shows "ai2.appinventor.mit.edu". The project title is "Smart\_Waste\_Management\_System\_For\_Metropolitan\_Cities". The interface is split into three main sections: Blocks, Viewer, and Media.

**Blocks Section:** The "Built-in" category is selected. The "Logic" block palette is visible, showing a "when Button1.Click" block. The "Screen2" category is also expanded, showing various UI components like "VerticalArrangement1", "HorizontalArrangement1", "Label3", "HorizontalArrangement2", "Label1", and "TextBox1".

**Viewer Section:** The main workspace shows a visual representation of the login logic. A blue backpack icon is in the top right corner. The logic is as follows:

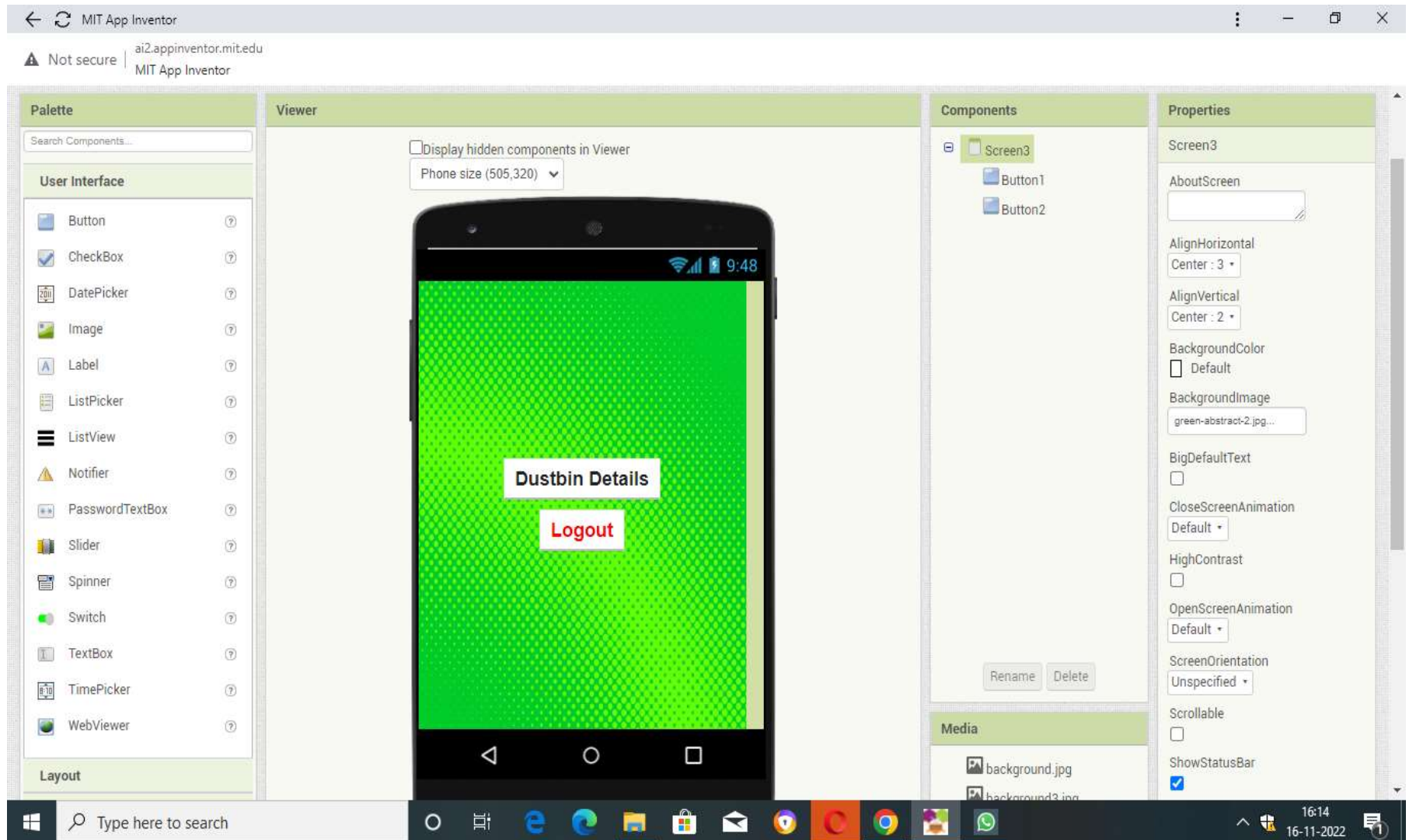
- when Button1.Click** (yellow block)
  - do** (green block)
    - if** (green block) with conditions:
      - `TextBox1.Text = "Admin"` (green block)
      - and** (green block)
      - `PasswordTextBox1.Text = "12345678"` (green block)
    - then** (green block): `open another screen screenName Screen3` (red block)
    - else** (green block): `call Notifier1.ShowAlert` (purple block) with `notice "Check Your Credentials"` (purple block)

**Media Section:** The "Show Warnings" block is visible, showing two warning icons (yellow triangle and red X) with a count of 0.

The Windows taskbar at the bottom shows the system clock as 16:14 on 16-11-2022, along with various application icons.



# FRONT END OF GARBAGE DETAILS PAGE



# BACKEND DEVELOPMENT OF GARBAGE DETAILS PAGE

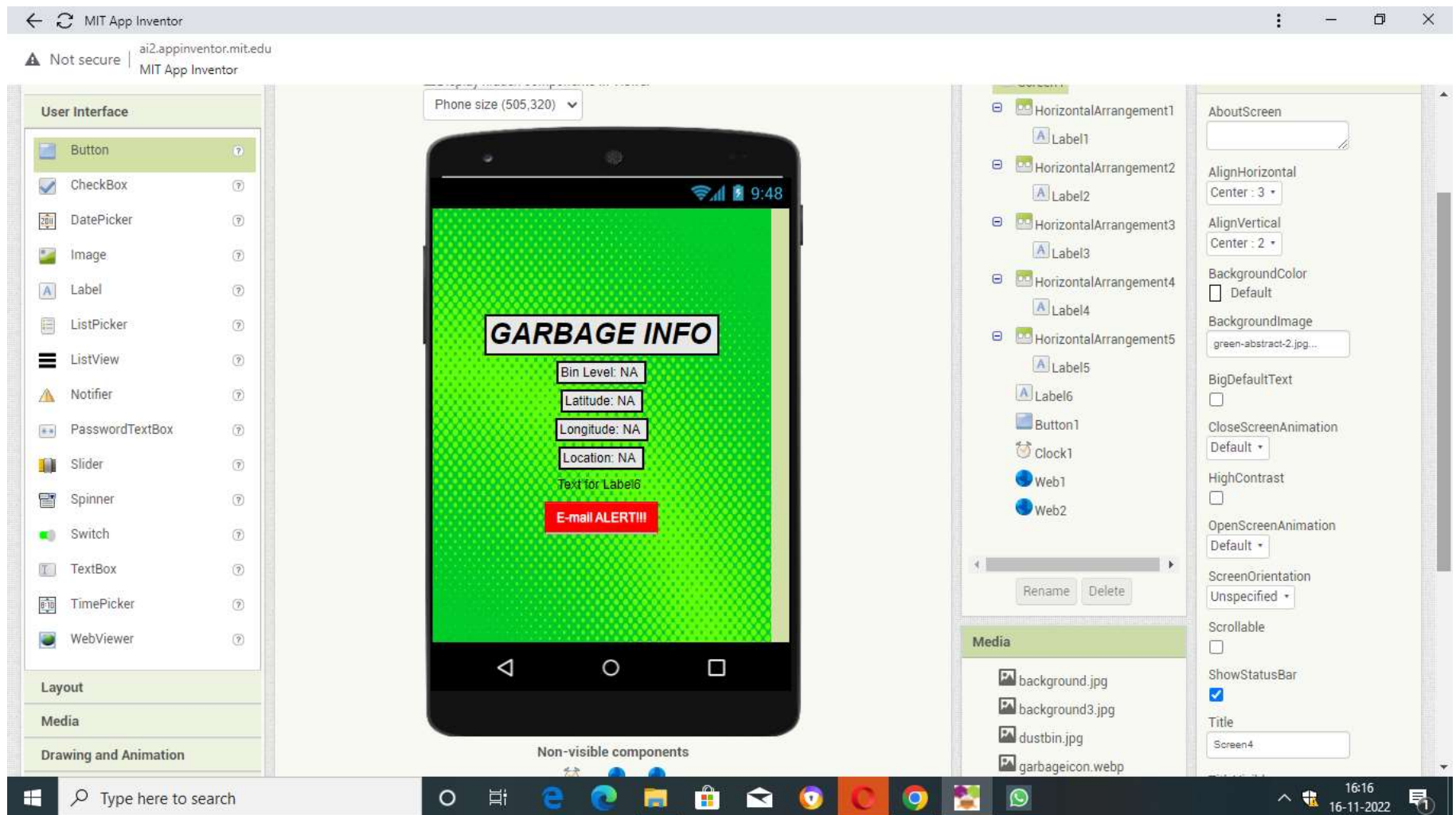
The screenshot displays the MIT App Inventor web interface. The browser address bar shows 'ai2.appinventor.mit.edu' with a 'Not secure' warning. The MIT App Inventor logo is in the top left. The main header bar is green and contains the project name 'Smart\_Waste\_Management\_System\_For\_Metropolitan\_Cities', buttons for 'Screen3', 'Add Screen ...', 'Remove Screen', and 'Publish to Gallery', and tabs for 'Designer' and 'Blocks'.

The interface is divided into three main sections:

- Blocks:** A sidebar on the left lists categories: Built-in (Control, Logic, Math, Text, Lists, Dictionaries, Colors, Variables, Procedures), Screen3 (Button1, Button2), and Any component. At the bottom are 'Rename' and 'Delete' buttons.
- Viewer:** The central workspace showing the logic blocks for the app. It contains two event-driven blocks:
  - When Button1 Clicked, do: open another screen screenName Screen4
  - When Button2 Clicked, do: open another screen screenName Screen3
- Designer:** The right side of the workspace, currently empty, showing a placeholder for a screen. It includes a 'Show Warnings' button at the bottom left and a trash can icon at the bottom right.

The Windows taskbar at the bottom shows the system clock as 16:15 on 16-11-2022.

# FRONT END OF GARBAGE INFO PAGE LINKED TO WEB PAGE





# BACK END OF GARBAGE INFO PAGE LINKED TO WEB PAGE

MIT App Inventor

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MIT APP INVENTOR

Projects ▾ Connect ▾ Build ▾ Settings ▾ Help ▾

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Smart\_Waste\_Management\_System\_For\_Metropolitan\_Cities Screen4 ▾ Add Screen ... Remove Screen Publish to Gallery

Designer Blocks

Blocks

Built-in

- Control
- Logic
- Math
- Text
- Lists
- Dictionaries
- Colors
- Variables
- Procedures

Screen4

- HorizontalArranger
  - Label1
- HorizontalArranger
  - Label2
- HorizontalArranger
  - Label3

Viewer

when Clock1.Timer

do

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

when Button1.Click

- set Web2.Uri to "http://127.0.0.1:1880/command?command=binfull"
- call Web2.Get

Show Warnings

when Web1.Get...

16:16 16-11-2022

# BACK END OF GARBAGE INFO PAGE LINKED TO WEB PAGE

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Smart\_Waste\_Management\_System\_For\_Metropolitan\_Cities Screen4 ▾ Add Screen ... Remove Screen Publish to Gallery

Designer Blocks

Blocks

- Built-in
  - Control
  - Logic
  - Math
  - Text
  - Lists
  - Dictionaries
  - Colors
  - Variables
  - Procedures
- Screen4
  - HorizontalArranger
  - Label1
  - HorizontalArranger
  - Label2
  - HorizontalArranger
  - Label3

Viewer

when Web1 GotText

url responseCode responseType responseContent

do

set Label1 Text to look up in pairs key "bin level" pairs call Web1 JsonTextDecode jsonText get responseContent

notFound "not found"

set Label2 Text to look up in pairs key "longitude" pairs call Web1 JsonTextDecode jsonText get responseContent

notFound "not found"

set Label3 Text to look up in pairs key "latitude" pairs call Web1 JsonTextDecode jsonText get responseContent

notFound "not found"

set Label4 Text to look up in pairs key "Location" pairs call Web1 JsonTextDecode jsonText get responseContent

notFound "not found"

Show Warnings

16:17  
16-11-2022