

SPRINT4

Date	17 November 2022
Team ID	PNT2022TMID53555
Project Name	Gas leakage monitoring and alerting system
Maximum Marks	20 POINTS

USER LOGIN

gas Screen3 Add Screen ... Remove Screen Publish to Gallery Designer Blocks

Search Components...

User Interface

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

Layout

Media

Drawing and Animation

Maps

Charts

Sensors

Social

Viewer

☐ Display hidden components in Viewer

Phone size (505,320)

Non-visible components

- FirebaseDB1

Components

- Screen3
 - VerticalArrangement1
 - Label1
 - Label2
 - TextBox1
 - PasswordTextBox1
 - Label4
 - LOGIN
 - SIGN_IN
 - FirebaseDB1

Rename Delete

Media

Upload File ...

Properties

Screen3

AboutScreen

AlignHorizontal

Left: 1

AlignVertical

Top: 1

BackgroundColor

☐ Default

BackgroundImage

None...

BigDefaultText

☐

CloseScreenAnimation

Default

HighContrast

☐

OpenScreenAnimation

Default

ScreenOrientation

Unspecified

Scrollable

☐

ShowStatusBar

☒

Title

Screen3

TitleVisible

☒

DISPLAYING THE VALUE FORM NODE RED TO MIT INVERTER APP

The screenshot displays the MIT App Inventor web interface for an app named "gas". The interface is divided into several panels:

- Top Bar:** Includes the app name "gas", navigation buttons ("Screen1", "Add Screen...", "Remove Screen", "Publish to Gallery"), and tabs for "Designer" and "Blocks".
- Left Panel (Palette):** Contains a search bar and categorized components:
 - User Interface:** Button, CheckBox, DatePicker, Image, Label, ListPicker, ListView, Notifier, PasswordTextBox, Slider, Spinner, Switch, TextBox, TimePicker, WebViewer.
 - Layout:**
 - Media:**
 - Drawing and Animation:**
 - Maps:**
 - Charts:**
 - Sensors:**
 - Social:**
- Center Panel (Viewer):** Shows a mobile phone mockup of the app. The app has a status bar at the top with the time 9:48. The main screen contains:
 - A header "Screen1".
 - A label "Temperature" followed by a text input field.
 - A label "Gas Level" followed by a text input field.
 - A "Navigate" button at the bottom.Below the mockup, a section for "Non-visible components" lists "Web1", "Clock1", and "Notifier1".
- Right Panel:** Divided into "Components" and "Properties".
 - Components:** A tree view showing the app's structure: Screen1 (containing HorizontalArrangement1 with Label1 and TextBox2; HorizontalArrangement2 with Label2 and TextBox1; Button1; Web1; Clock1; and Notifier1).
 - Properties:** A list of properties for the selected component (Screen1), including AboutScreen, AccentColor, AlignHorizontal, AlignVertical, AppName (set to "gas"), BackgroundColor, BackgroundImage, BigDefaultText, BlocksToolkit, CloseScreenAnimation, DefaultFileScope, HighContrast, Icon, OpenScreenAnimation, PrimaryColor, and PrimaryColorDark.

MIT App Inventor

Screen1 Add Screen ... Remove Screen Publish to Gallery

gas

Designer Blocks

Search Components...

User Interface

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

Layout

Media

Drawing and Animation

Viewer

☐ Display hidden components in Viewer

Phone size (505,320)

Screen1

Temperature

Humidity

Pressure

Gas Level

Components

- Screen1
 - HorizontalArrangement1
 - Label1
 - TextBox1
 - HorizontalArrangement2
 - Label2
 - TextBox2
 - HorizontalArrangement3
 - Label3
 - TextBox3
 - HorizontalArrangement4
 - Label4
 - TextBox4
 - Clock1
 - Web1

Media

Upload File ...

Properties

Screen1

AboutScreen

AccentColor

Default

AlignHorizontal

Left: 1

AlignVertical

Top: 1

AppName

gas

BackgroundColor

Default

BackgroundImage

None...

BigDefaultText

☐

BlocksToolkit

All

CloseScreenAnimation

Default

DefaultFileScope

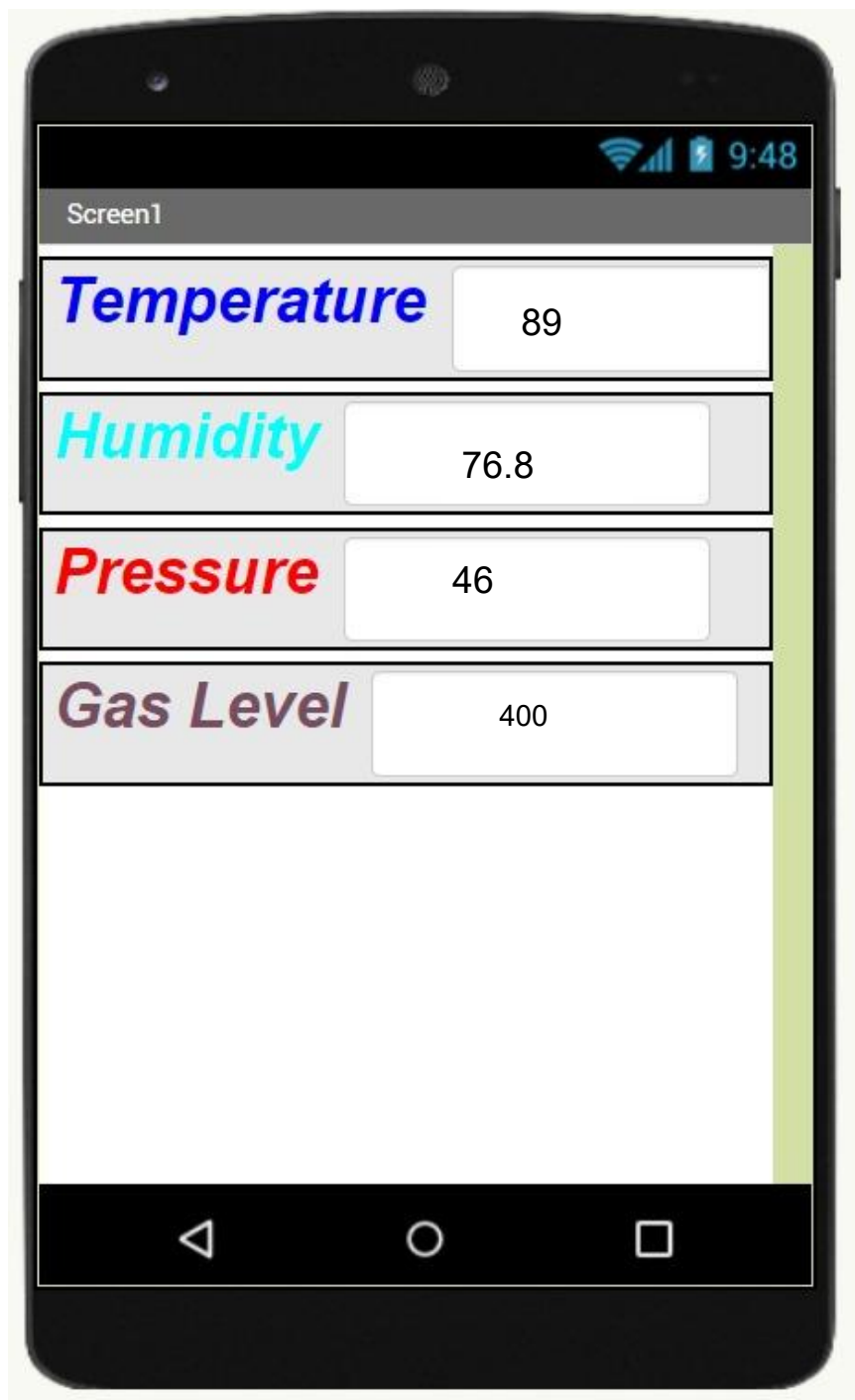
App

HighContrast

☐

Icon

None...



DISPLAYING THE LATITUDE AND LONGITUDE OF THE GAS LEAKAGE LOCATION IN MAP

gas

Screen2 • Add Screen ... Remove Screen Publish to Gallery

Designer Blocks

Search Components...

User Interface

Button

CheckBox

DatePicker

Image

Label

ListPicker

ListView

Notifier

PasswordTextBox

Slider

Spinner

Switch

TextBox

TimePicker

WebView

Layout

Media

Drawing and Animation

Maps

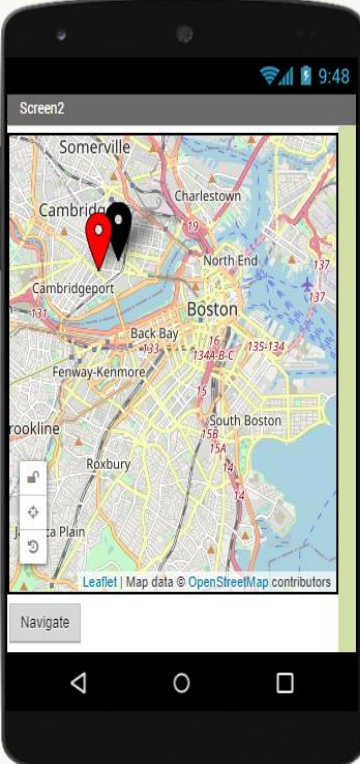
Charts

Viewer

Display hidden components in Viewer

Phone size (505,320)

Screen2



Non-visible components

LocationSensor1

Navigation1

Web1

Clock1

Components

Screen2

Map1

Marker1

Marker2

LineString1

Button1

LocationSensor1

Navigation1

Web1

Clock1

Rename

Delete

Media

Upload File ...

Properties

Screen2

AboutScreen

AlignHorizontal

Left : 1

AlignVertical

Top : 1

BackgroundColor

Default

BackgroundImage

None...

BigDefaultText

CloseScreenAnimation

Default

HighContrast

OpenScreenAnimation

Default

ScreenOrientation

Unspecified

Scrollable

ShowStatusBar

☒

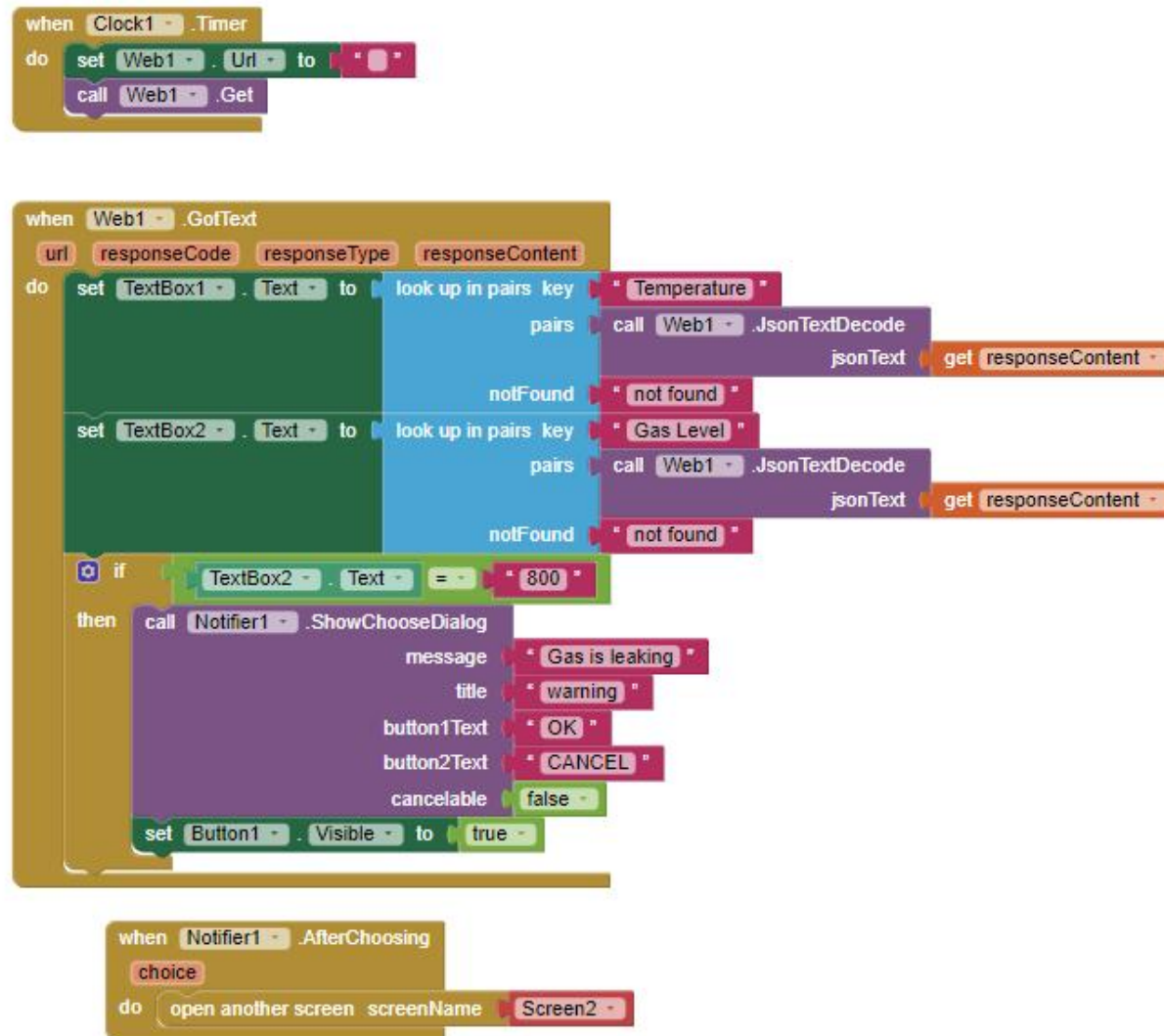
Title

Screen2

TitleVisible

☒

BACKEND OF THE GAS LEAKAGE APP:



```

when Clock1.Timer
do
  set Web1.Url to "h"
  call Web1.Get

```

```

when Web1.GotText
  url responseCode responseType responseContent
do
  set Navigation1.EndLatitude to
    get responseContent Latitude
    pairs call Web1.JsonTextDecode
    set responseContent to jsonText get responseContent
    notFound "not found"

  set Navigation1.EndLongitude to
    look up in pairs key Longitude
    pairs call Web1.JsonTextDecode
    notFound "not found"
    jsonText get responseContent

```

```

when Button1.Click
do
  call Map1.PanTo
    latitude LocationSensor1.Latitude
    longitude LocationSensor1.Longitude
    zoom 10

  set Navigation1.StartLatitude to LocationSensor1.Latitude
  set Navigation1.StartLongitude to LocationSensor1.Longitude
  set Marker1.Latitude to Navigation1.StartLatitude
  set Marker1.Longitude to Navigation1.StartLongitude
  set Marker2.Latitude to Navigation1.EndLatitude
  set Marker2.Longitude to Navigation1.EndLongitude
  call Navigation1.RequestDirections

  when Navigation1.GotDirections
    directions points distance duration
  do
    set LineString1.Points to get points
    set LineString1.Visible to true

```

