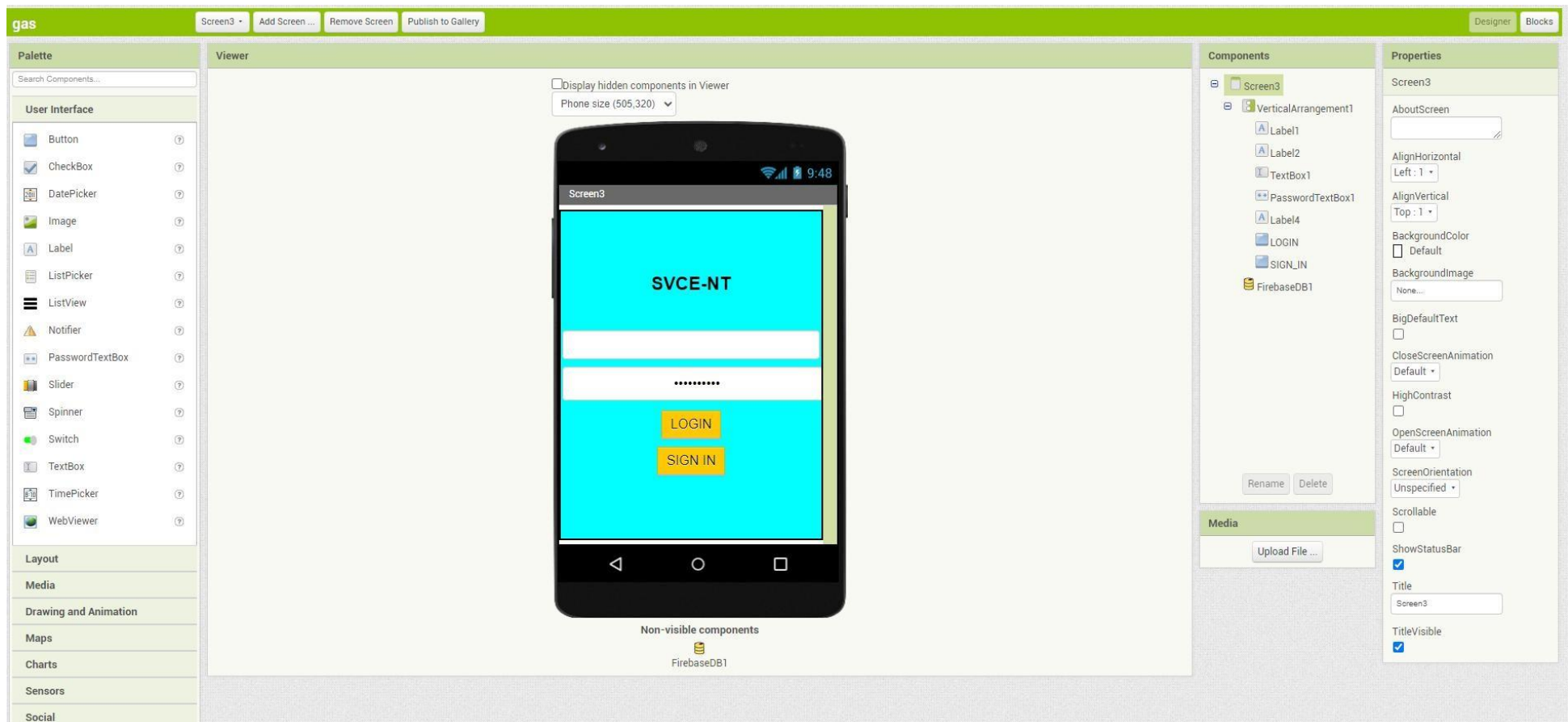


SPRINT4

Date	17 November 2022
Team ID	PNT2022TMID53586
Project Name	Gas leakage monitoring and alerting system
Maximum Marks	20 POINTS

USER LOGIN



DISPLAYING THE VALUE FORM NODE RED TO MIT INVERTER APP

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

- Top Bar:** Contains the app name "gas", a dropdown menu set to "Screen1", and buttons for "Add Screen...", "Remove Screen", and "Publish to Gallery". On the right, there are "Designer" and "Blocks" tabs.
- Left Panel (Palette):** A search bar "Search Components..." is at the top. Below it are categories: "User Interface" (containing Button, CheckBox, DatePicker, Image, Label, ListPicker, ListView, Notifier, PasswordTextBox, Slider, Spinner, Switch, TextBox, TimePicker, and WebViewer), "Layout", "Media", "Drawing and Animation", "Maps", "Charts", "Sensors", and "Social".
- Center Panel (Viewer):** Displays a mobile phone mockup. Above the mockup, there is a checkbox "Display hidden components in Viewer" and a dropdown for "Phone size (505,320)". The mockup itself shows a screen titled "Screen1" with two input fields labeled "Temperature" and "Gas Level", and a "Navigate" button at the bottom. Below the mockup, a section titled "Non-visible components" shows icons for "Web1", "Clock1", and "Notifier1".
- Right Panel (Components and Properties):**
 - Components:** A tree view showing the hierarchy: "Screen1" contains "HorizontalArrangement1" (with "Label1" and "TextBox2"), and "HorizontalArrangement2" (with "Label2" and "TextBox1"). It also lists "Button1", "Web1", "Clock1", and "Notifier1". Below this are "Rename" and "Delete" buttons, and a "Media" section with an "Upload File..." button.
 - Properties:** A list of properties for the selected "Screen1" component, including "AboutScreen", "AccentColor" (set to "Default"), "AlignHorizontal" (set to "Left : 1"), "AlignVertical" (set to "Top : 1"), "AppName" (set to "gas"), "BackgroundColor" (set to "Default"), "BackgroundImage" (set to "None..."), "BigDefaultText" (unchecked), "BlocksToolkit" (set to "All"), "CloseScreenAnimation" (set to "Default"), "DefaultFileScope" (set to "App"), "HighContrast" (unchecked), "Icon" (set to "None..."), "OpenScreenAnimation" (set to "Default"), "PrimaryColor" (set to "Default"), and "PrimaryColorDark" (set to "Default").

MIT App Inventor

MIT App Inventor

Not secure | ai2.appinventor.mit.edu/#5400011807260672

gas 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

Media

Drawing and Animation

Viewer

☐ Display hidden components in Viewer

Phone size (605,320) ▾

Screen1

Temperature

Humidity

Pressure

Gas Level

Components

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

Rename Delete

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

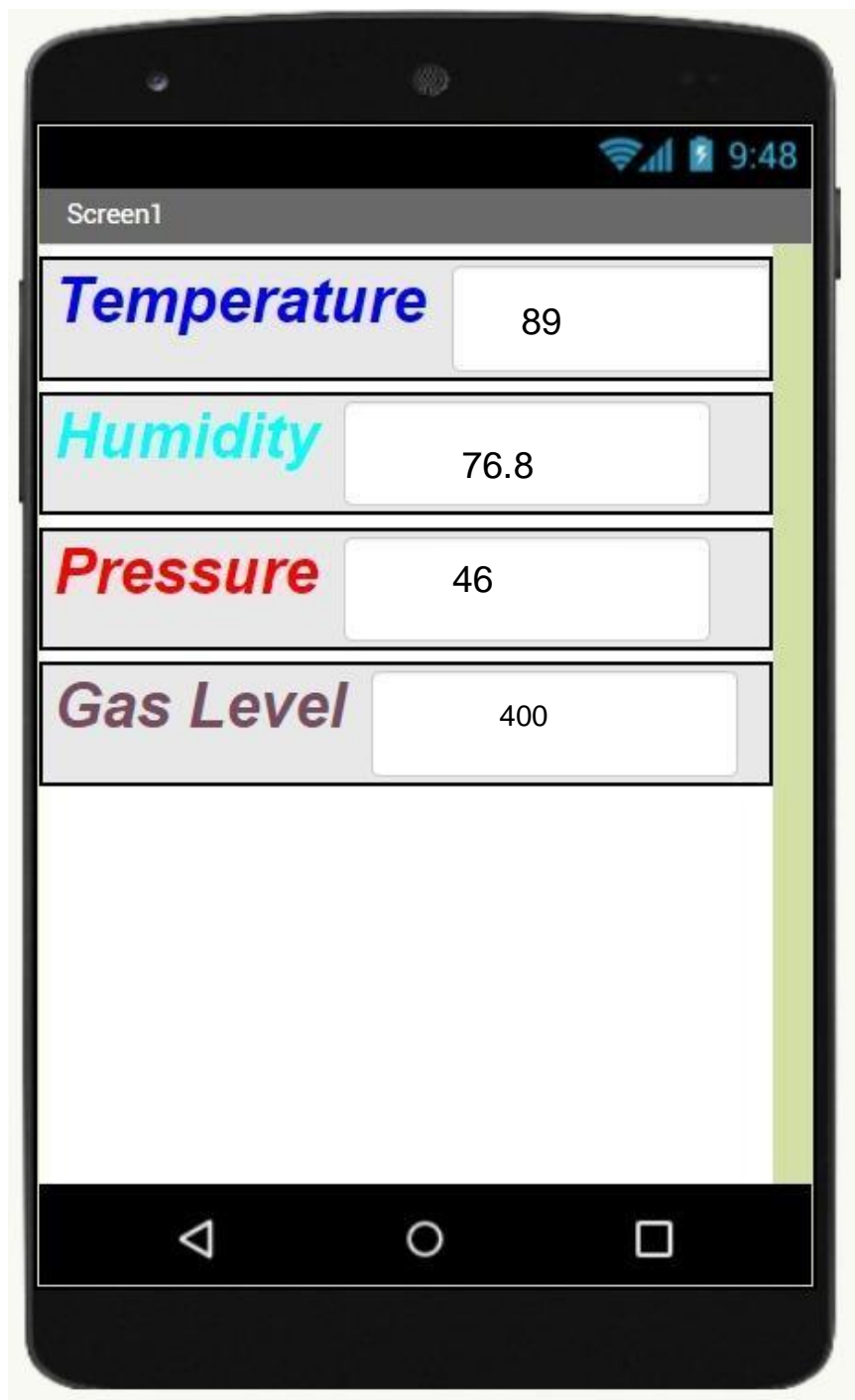
App ▾

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

Palette

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)

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

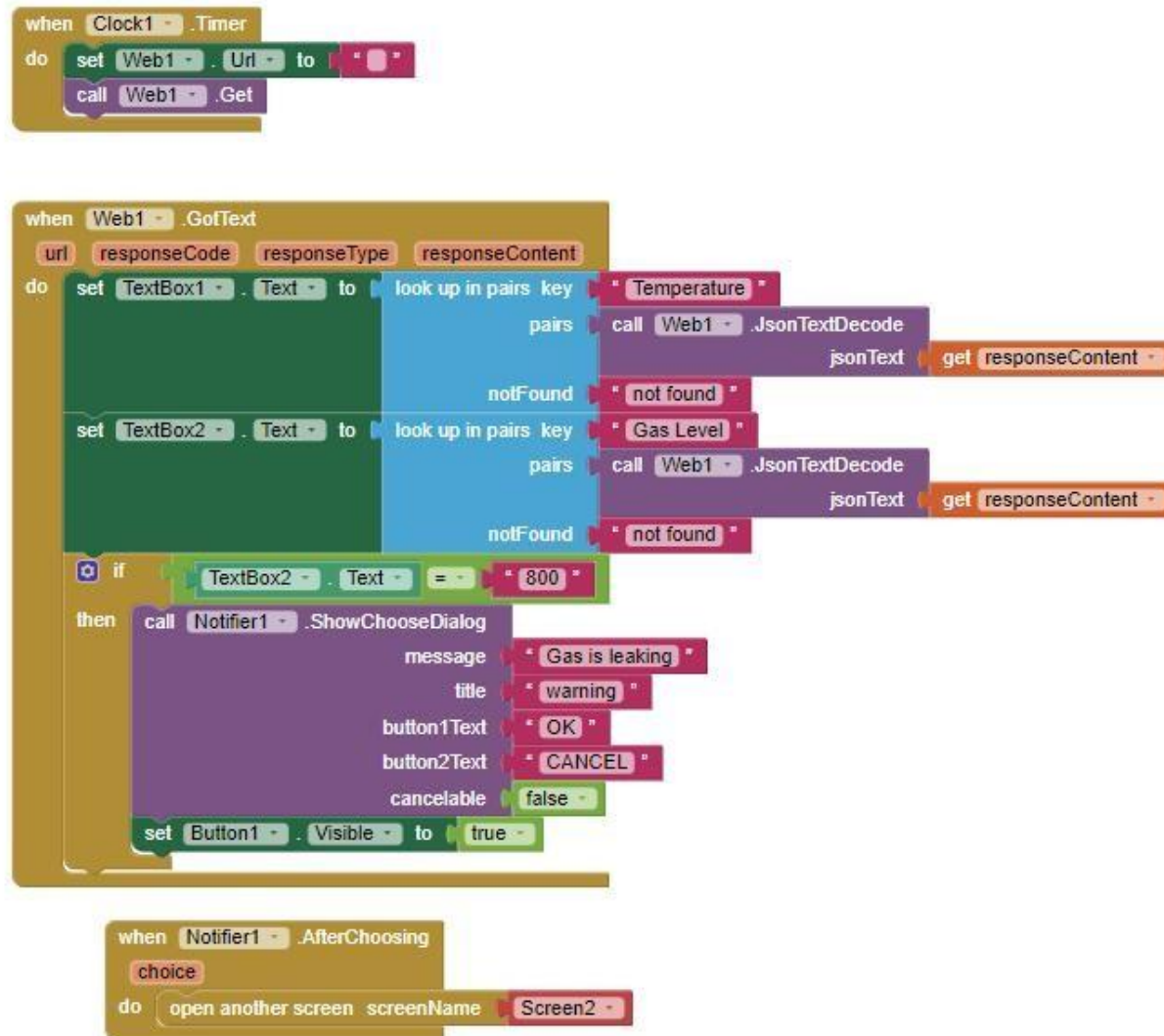
ShowStatusBar

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
    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

```

```
when LOGIN .Click
do
  call FirebaseDatabase1 .GetValue
    tag TextBox1 . Text
    valueIfTagNotThere " NA "
```

```
when SIGN_IN .Click
do
  call FirebaseDatabase1 .StoreValue
    tag TextBox1 . Text
    valueToStore PasswordTextBox1 . Text
```

```
when FirebaseDatabase1 .GotValue
  tag value
do
  if
    get tag = TextBox1 . Text
  then
    if
      get tag = PasswordTextBox1 . Text
    then
      open another screen screenName Screen1
  set Label2 . Text to " Wrong Username "
```