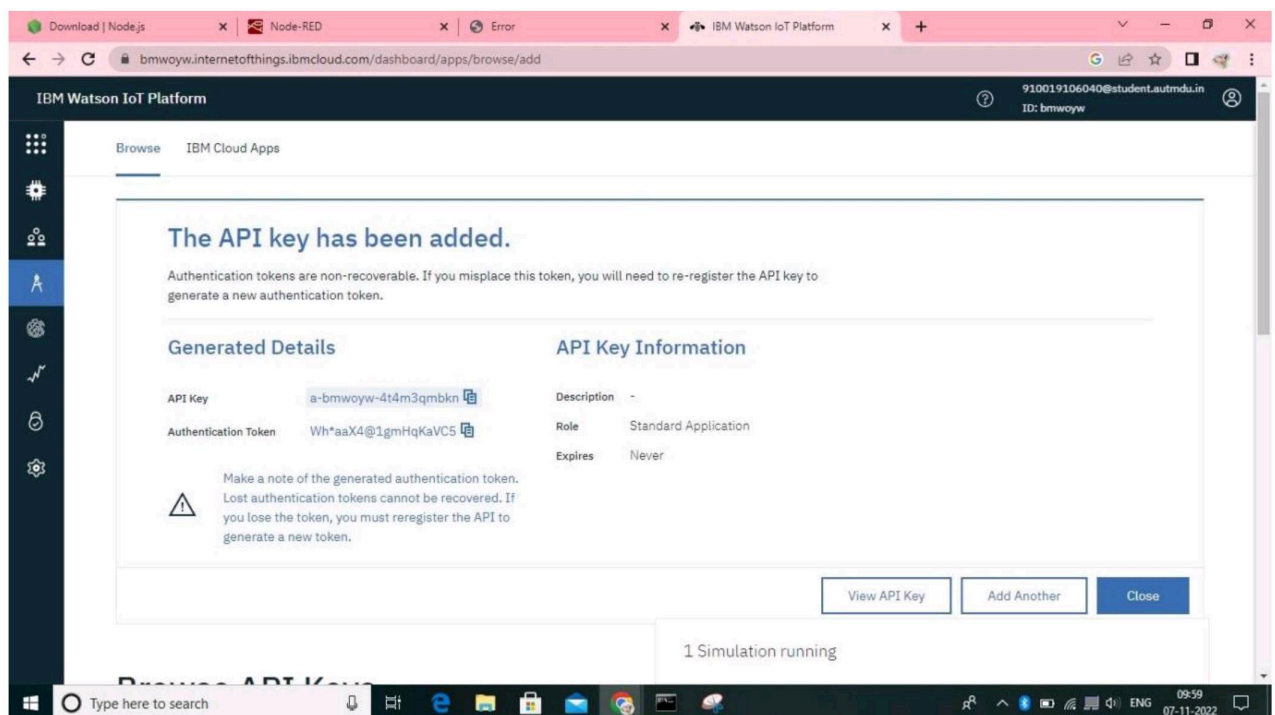


Date	07-11-2022
Team ID	PNT2022TMID47485
Project name	Signs with smart connectivity for better road safety
Maximum marks	20 marks

Sprint-2	US-1	Configure the connection security and create API keys that are used in the Node-RED service for accessing the IBM IoT Platform.
Sprint-2	US-2	Create a Node-RED service.

US-1 Configure the connection security and create API keys that are used in the Node-red service for accessing the IBM IOT platform



## US-2 Create a Node-red service

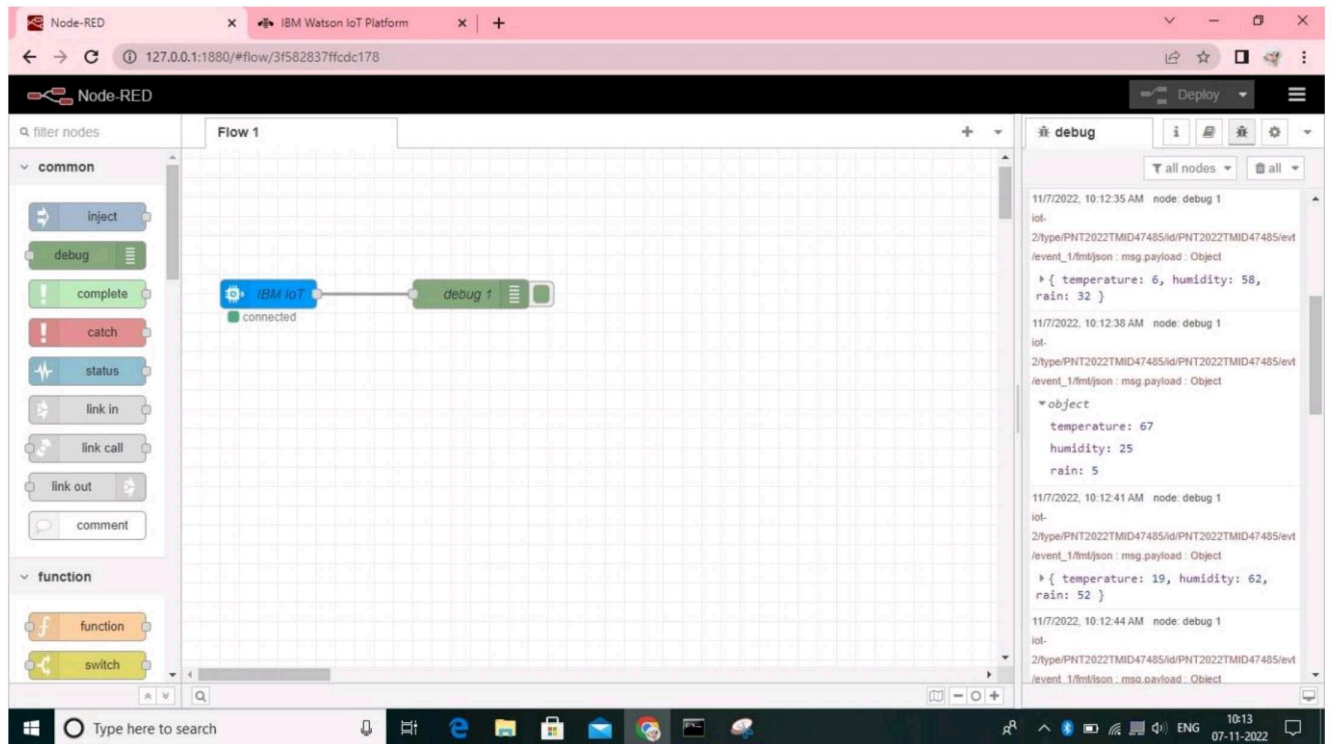
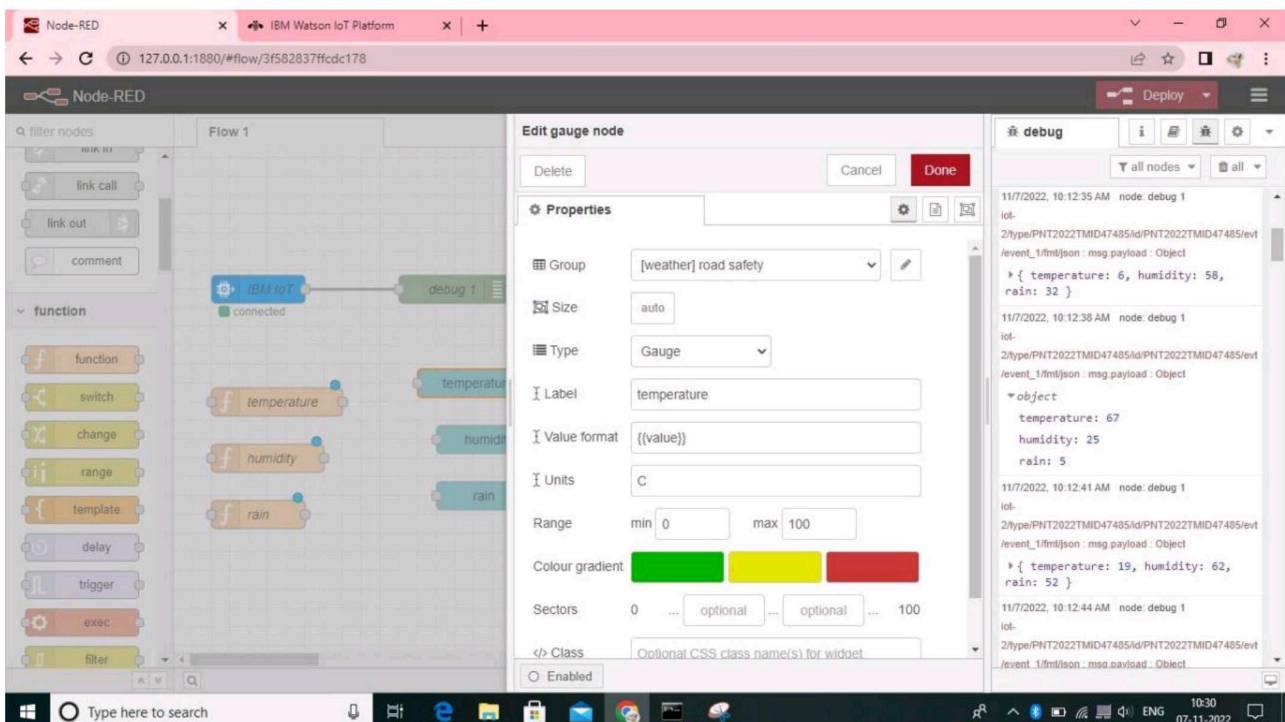


Fig: Monitoring the sensor values- temperature, humidity, rain .



Node-RED interface showing a flow with an IBM IoT node connected to a debug node. The 'Edit gauge node' dialog is open, displaying properties for a gauge widget. The gauge is configured with the following settings:

- Group: [weather] road safety
- Size: auto
- Type: Gauge
- Label: humidity
- Value format: {{value}}
- Units: units
- Range: min 0, max 100
- Colour gradient: [Green, Yellow, Red]
- Sectors: 0, optional, optional, 100
- Class: Optional CSS class name(s) for widget

The debug console shows the following log entries:

```
11/7/2022, 10:12:35 AM node: debug 1
iot-
2/type/PNT2022TMD47485/id/PNT2022TMD47485/evt
/event_1/fmt/json : msg.payload : Object
{ temperature: 6, humidity: 58,
rain: 32 }

11/7/2022, 10:12:38 AM node: debug 1
iot-
2/type/PNT2022TMD47485/id/PNT2022TMD47485/evt
/event_1/fmt/json : msg.payload : Object
{ temperature: 67,
humidity: 25,
rain: 5 }

11/7/2022, 10:12:41 AM node: debug 1
iot-
2/type/PNT2022TMD47485/id/PNT2022TMD47485/evt
/event_1/fmt/json : msg.payload : Object
{ temperature: 19, humidity: 62,
rain: 52 }
```

Node-RED interface showing a flow with an IBM IoT node connected to a debug node. The 'Edit gauge node' dialog is open, displaying properties for a gauge widget. The gauge is configured with the following settings:

- Group: [weather] road safety
- Size: auto
- Type: Gauge
- Label: rain
- Value format: {{value}}
- Units: units
- Range: min 0, max 100
- Colour gradient: [Green, Yellow, Red]
- Sectors: 0, optional, optional, 100
- Class: Optional CSS class name(s) for widget

The debug console shows the following log entries:

```
11/7/2022, 10:12:35 AM node: debug 1
iot-
2/type/PNT2022TMD47485/id/PNT2022TMD47485/evt
/event_1/fmt/json : msg.payload : Object
{ temperature: 6, humidity: 58,
rain: 32 }

11/7/2022, 10:12:38 AM node: debug 1
iot-
2/type/PNT2022TMD47485/id/PNT2022TMD47485/evt
/event_1/fmt/json : msg.payload : Object
{ temperature: 67,
humidity: 25,
rain: 5 }

11/7/2022, 10:12:41 AM node: debug 1
iot-
2/type/PNT2022TMD47485/id/PNT2022TMD47485/evt
/event_1/fmt/json : msg.payload : Object
{ temperature: 19, humidity: 62,
rain: 52 }
```

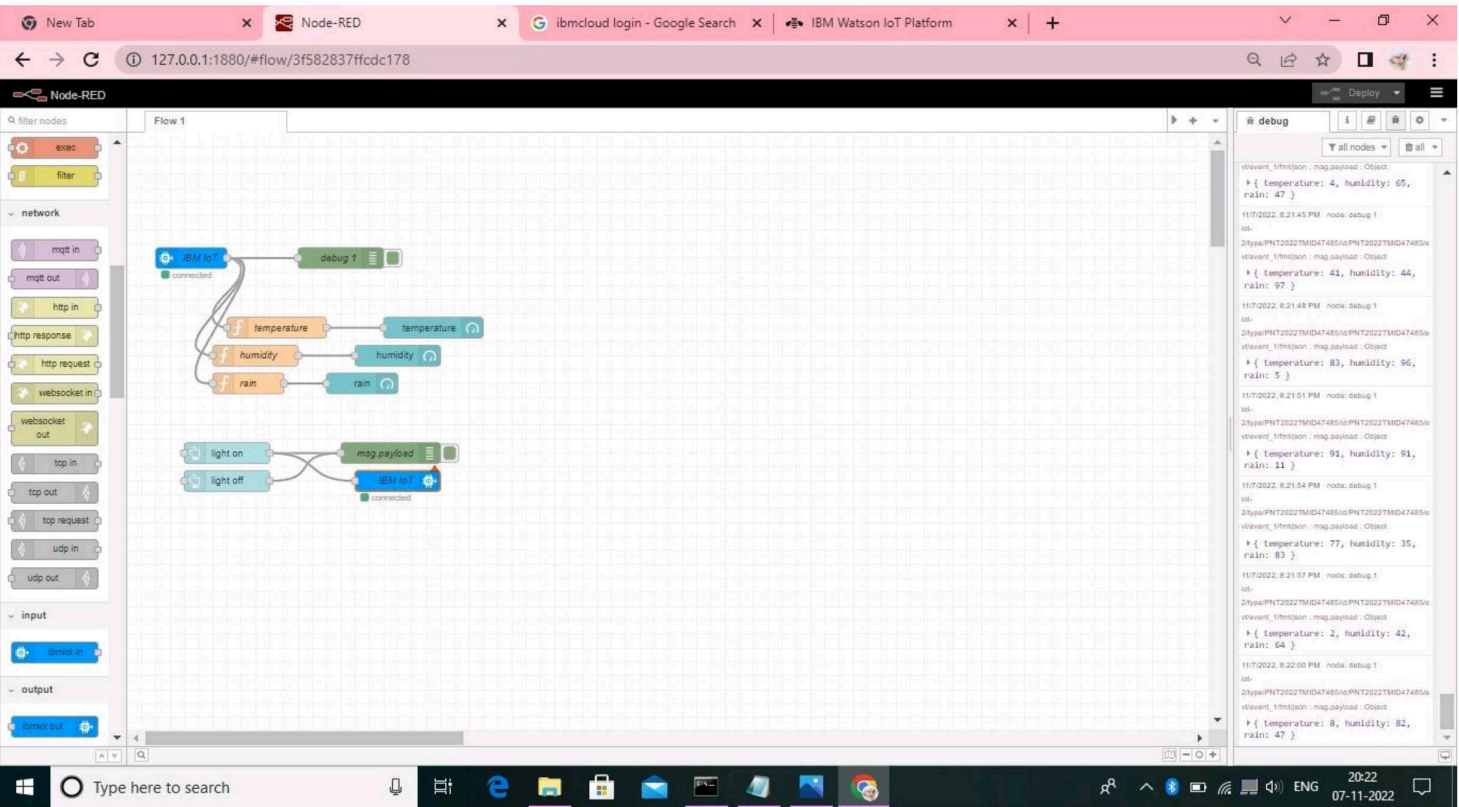
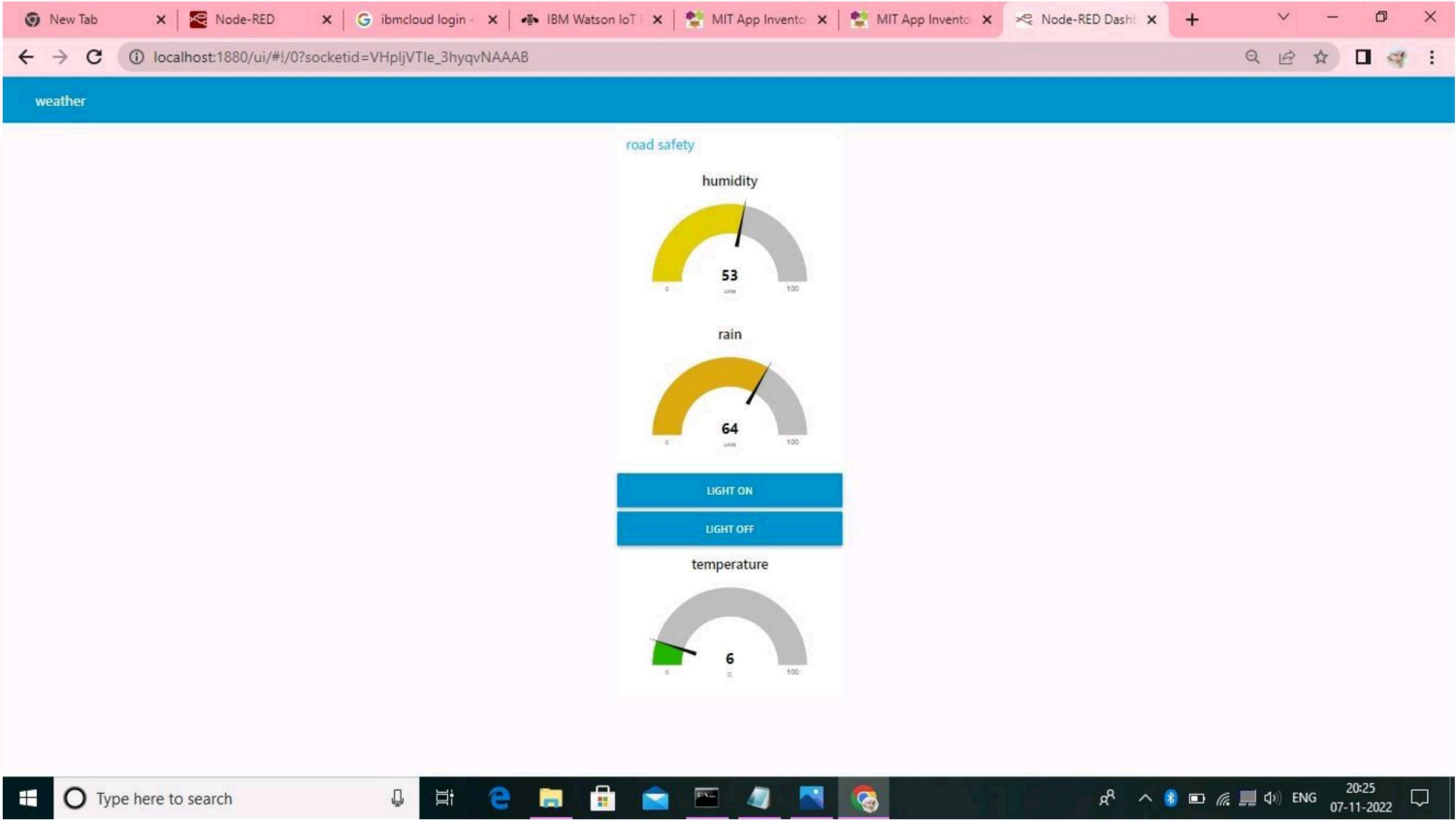
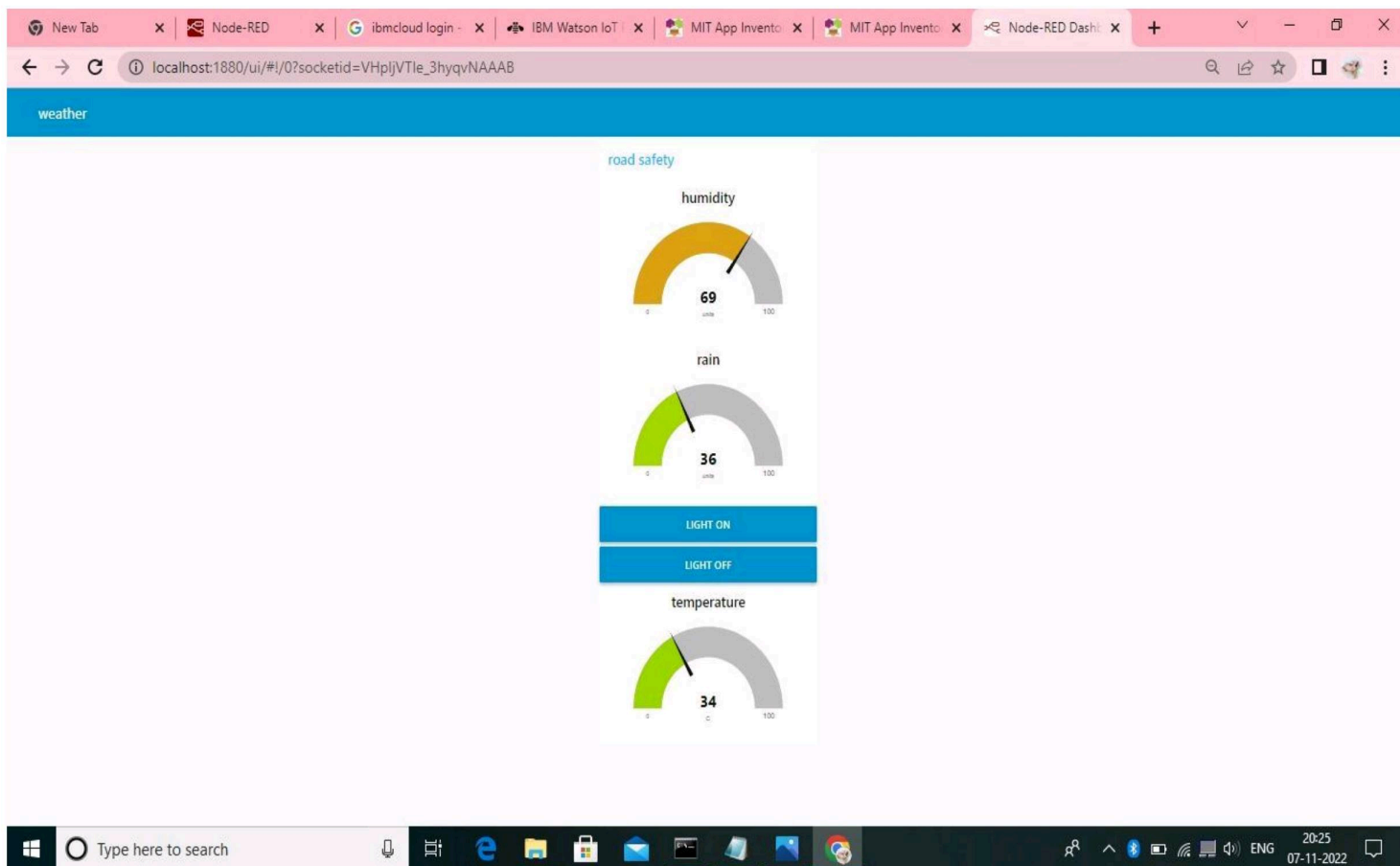


Fig: output from recent events







## MIT APP INVERTER TO DESIGN THE APP:

Node-RED Node-RED Dashboard IBM Watson IoT Platform Node-RED Dashboard New Tab mit app inventor - Google

google.com/search?q=mit+app+inventor&rlz=1C1FKPE\_enIN950IN950&oq=MIT+&aqs=chrome..69l67j0l67j131i433j0l20i263i512j46i67j433i512j0i67j46i433i51...

Google

mit app inventor

About 67,60,000 results (0.41 seconds)

<https://appinventor.mit.edu>

**MIT App Inventor**

MIT App Inventor Director Hal Abelson at MIT News ... "Kids are people tool" Professor Hal Abelson has dedicated his career to making information technology more ...

**Get Started**

App Inventor is a cloud-based tool, which means you can create ...

**Welcome to App Inventor 2!**

To go directly to designing and building apps with Inventor 2 ...

**App Inventor**

Your browser might not be compatible. To use App Inventor ...

**Tutorials**

Beginner Tutorials - Artificial Intelligence - Mole Mash - PicCall

More results from mit.edu »

People also ask

**App Inventor for Android**

Computer program

MIT App Inventor is a web application integrated development environment originally provided by Google, and now maintained by the Massachusetts Institute of Technology. Wikipedia

**Initial release date:** 15 December 2010

**Operating system:** Android

The screenshot shows a Google search result for 'mit app inventor'. The search results show the MIT App Inventor website link and a snippet of text. On the right, there's a card for 'App Inventor for Android' with a description and release date.

New TabNode-REDibmcloud login -IBM Watson IoTMIT App InventorMIT App InventorNode-RED Dash

Not secure | ai2.appinventor.mit.edu/#4952216117837824

signs\_with\_smart\_connectivity\_for\_better\_road\_safetyScreen1Add ScreenRemove ScreenPublish to GalleryDesignerBlocks

Search Components...User InterfaceButtonCheckBoxDatePickerImageLabelListViewNotifierPasswordTextBoxSliderSpinnerSwitchTextBoxTimePickerWebViewerLayoutMediaDrawing and AnimationMapsChartsSensorsSocial

Viewer

Display hidden components in ViewerPhone size (505,320)

Screen1

SMART ROAD SAFETY

TEMPERATURE

HUMIDITY

RAIN

CONTROL

light onlight off

Non-visible componentsClock1Web1Web2

ComponentsScreen1HorizontalArrangemeTextBox4HorizontalArrangemeButton1TextBox1HorizontalArrangemeButton2HorizontalArrangemeButton3HorizontalArrangemeTextBox5HorizontalArrangemeTextBox7TextBox6MediaUpload File...

PropertiesTextBox6BackgroundColorDefaultEnabledFontBoldFontItalicFontSize18.0FontTypefacedefaultHeightAutomaticWidthAutomaticHintHint for TextBox6MultiLineNumbersOnlyReadOnlyTextlight offTextAlignmentleft: 0TextColorDefault

Type here to search