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|---------------|--|
| DATE          | 04 - NOVEMBER - 2022                                 |
| TEAM ID       | PNT2022TMID47501                                     |
| PROJECT NAME  | PERSONAL ASSISTANCE FOR SENIORS WHO ARE SELF-RELIANT |
| 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 | 10 | High | Vaishnavi R<br>Sabari Muktheeswaran A |
| SPRINT-2 | US-2 | Create a Node-RED service  | 10 | High | Vaishnavi R<br>Sabari Muktheeswaran A |

## US-1: Configure the connection security and create API keys that are used in the Node-RED service for accessing the IBM IoT Platform

The screenshot shows the IBM Watson IoT Platform interface. The main view displays the 'Recent Events' tab for a device, showing a table of events. A modal window is open for creating a new event type, titled 'Device Type: VSVS\_DEVICETYPE'.

| Event   | Value       | Format | Last Received     |
|---------|-------------|--------|-------------------|
| event_1 | {"Time":18} | json   | a few seconds ago |
| event_1 | {"Time":10} | json   | a few seconds ago |
| event_1 | {"Time":4}  | json   | a few seconds ago |
| event_1 | {"Time":7}  | json   | a few seconds ago |
| event_1 | {"Time":15} | json   | a few seconds ago |

Items per page 50 | 1-1 of 1 item

**Modal: Device Type: VSVS\_DEVICETYPE**

- Events** 1
- New event type** (+)
- Event type name**: event\_1
- Send** (button)
- Schedule**: 20 Every Minute
- Payload**: Specify the event payload in the editor window or by uploading a CSV file.  
0 {  
1 "Time": random(0, 24)  
2 }  
3 }  
**Upload a CSV file** (button)
- What functions can I apply?** (link)
- Cancel** (button)
- Save** (button)

The screenshot shows the IBM Watson IoT Platform interface. The main view displays the 'Generate API Key' modal, which is currently on the 'Information' tab. Below the modal, the 'Browse API Keys' section is visible, showing a table of API keys.

**Generate API Key Modal**

- Information** (selected) | **Permissions**
- Description**: [Text input field]
- API Key Expires**: **Off** (selected) | **On** (radio button)
- Choose date** (button)
- Cancel** (button)
- Next** (button)

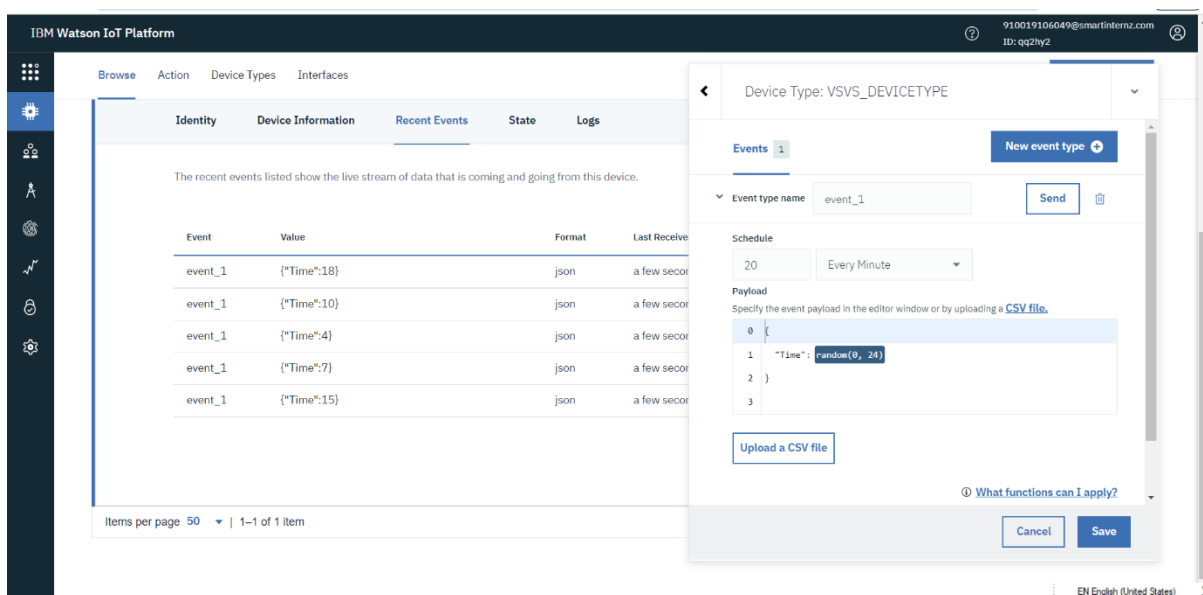
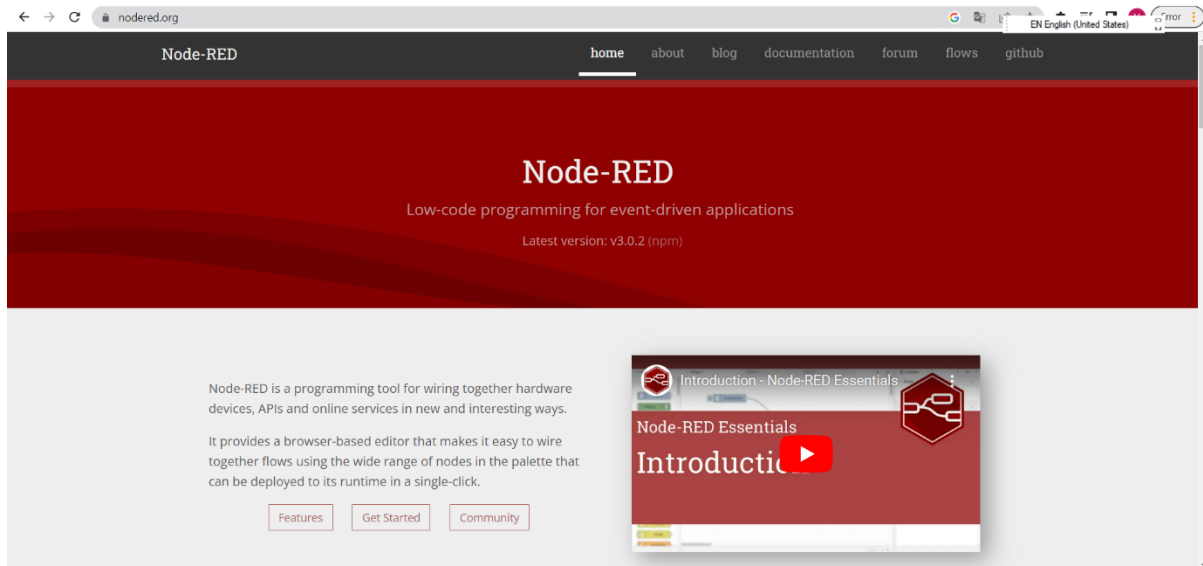
**Browse API Keys**

This table shows a summary of the API keys that have been added for the organization. It can be filtered,

1 Simulation running



## US-2: Create NODE-RED service:



IBM Watson IoT Platform

910019106049@smartinternz.com  
ID: qq2hy2

Browse Action Device Types Interfaces

Add Device

Identity Device Information **Recent Events** State Logs

The recent events listed show the live stream of data that is coming and going from this device.

| Event   | Value       | Format | Last Received     |
|---------|-------------|--------|-------------------|
| event_1 | {"Time":18} | json   | a few seconds ago |
| event_1 | {"Time":10} | json   | a few seconds ago |
| event_1 | {"Time":4}  | json   | a few seconds ago |
| event_1 | {"Time":7}  | json   | a few seconds ago |
| event_1 | {"Time":15} | json   | a few seconds ago |

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1 of 1 page

1 Simulation running

EN English (United States)

Node-RED

127.0.0.1:1880/#/flow/8a02183b55a8bb91

Flow 1

common

- inject
- debug
- complete
- catch
- status
- link in
- link call
- link out
- comment

function

- function
- switch
- change

IBM IoT

connected

debug

Edit ibmiot in node

Delete Cancel Done

Properties

- Authentication API Key
- API Key a351a50a2e75b56b
- Input Type Device Event
- Device Type All or VSVS\_DEVICETYPE
- Device Id All or vsvs7501
- Event All or +
- Format All or json
- QoS 0
- Name IBM IoT
- Service registered

Enabled

Info

Flows

- Flow 1
- Subflows
- Global Configuration Nodes

IBM IoT

Node \*da5d3eb9e3a05315\*

Type ibmiot in

show more

Move the selected nodes using the ↑ ↓ and → ← keys. Hold ⌘ to nudge them further

Fig: Properties of IBM IoT Node

Node-RED interface showing a flow with an IBM IoT node connected to a Time Node. The Time Node is configured with the following code:

```
1 msg.payload = msg.payload.Time
2 return msg;
```

The debug console shows the following log entries:

```
05/11/2022, 10:42:40 node: debug 1
iot-27typeVS/SVS_DEVICETYPEId/vs7501ev/evnt_1/fm
t/json : msg.payload : Object
> { Time: 8 }
```

The interface also includes a sidebar with various nodes and a top navigation bar.

Node-RED interface showing a flow with an IBM IoT node connected to a Time Node. The Time Node is configured with the following code:

```
1 msg.payload = msg.payload.Time
2 return msg;
```

The debug console shows the following log entries:

```
05/11/2022, 10:47:33 node: debug 1
iot-27typeVS/SVS_DEVICETYPEId/vs7501ev/evnt_1/fm
t/json : msg.payload : Object
> { Time: 4 }
```

The interface also includes a sidebar with various nodes and a top navigation bar.

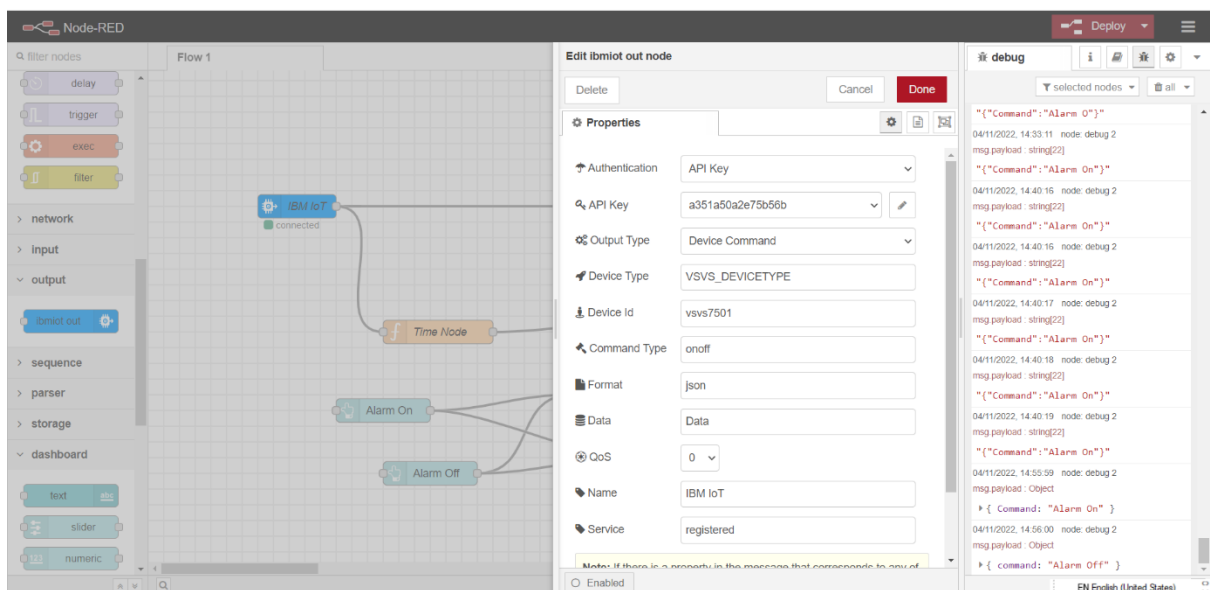
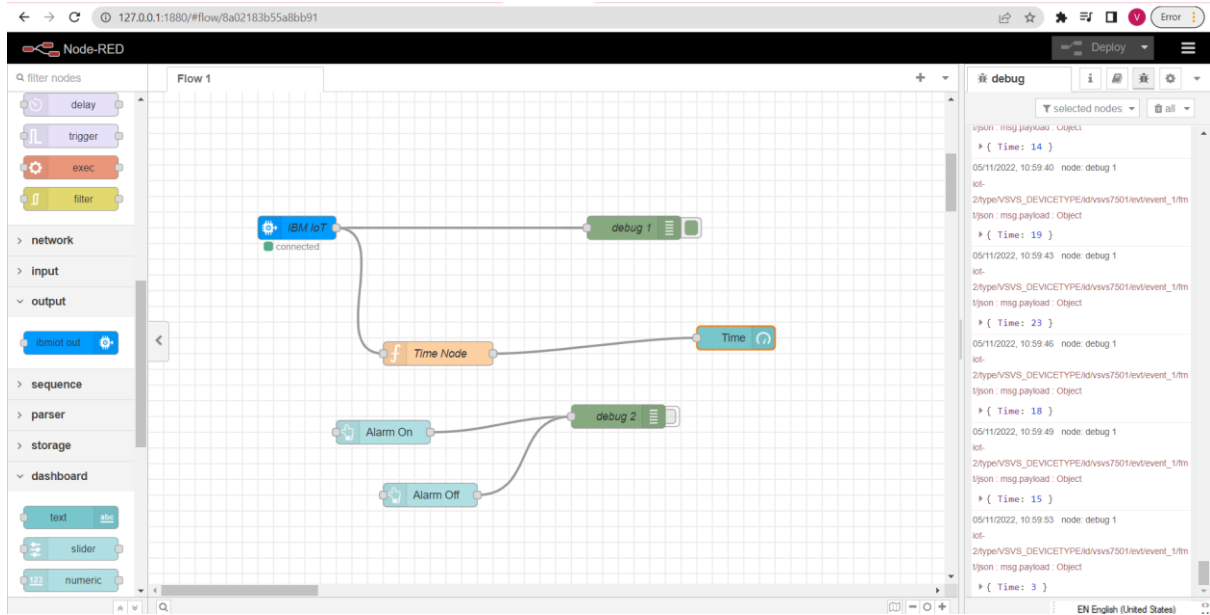
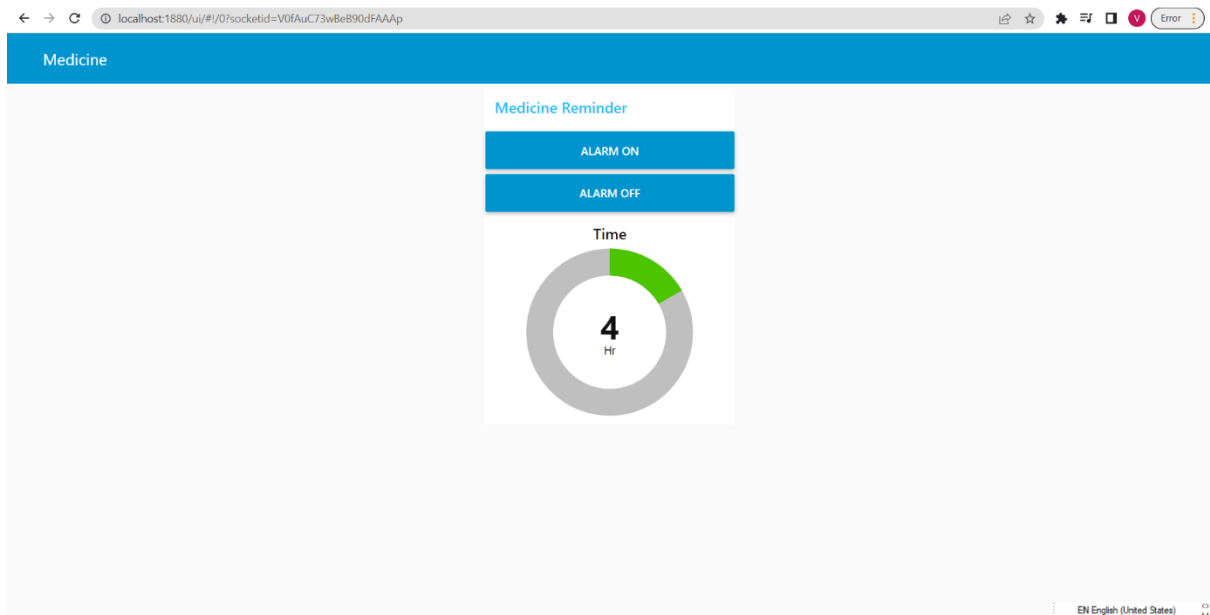


Fig: Properties of Alarm On/Off Node



## MIT APP INVENTOR TO DESIGN THE APP:

