Appendixes

Appendix A: Code Segment on Arduino

```
#include <Adafruit_ADS1X15.h>
#include <ADS1115-Driver.h>
#include <WiFi.h>
#include < PubSubClient.h >
// WiFi
const char* ssid = "Galaxy Note9";
const char* password = "87654321";
// MQTT Broker
const char *mqtt_broker = "broker.hivemq.com";
// const char *topic1 = "esp32_1/1";
const char *mqtt_username = "Admin123#";
const char *mqtt_password = "Admin123#";
const int mqtt_port = 1883;
WiFiClient espClient;
PubSubClient client(espClient);
Adafruit_ADS1115 ads;
// sensor pin mode
```

```
const int sensor4 = 36;
 const int sensor5 = 39;
 const int sensor6 = 33;
 const int sensor7 = 32;
 const int sensor8 = 35;
 const int sensor9 = 34;
//******************************
 void setup() {
  // initialize serial communication:
  Serial.begin(115200);
  ads.begin();
  // connecting to a WiFi network
 WiFi.mode(WIFI_STA);
 WiFi.begin(ssid, password);
 while (WiFi.status() != WL_CONNECTED) {
    delay(500);
    Serial.println("Connecting to WiFi..");
  }
 Serial.println("Connected to the WiFi network");
 //connecting to a mqtt broker
 client.setServer(mqtt_broker, mqtt_port);
 client.setCallback(callback);
 while (!client.connected()) {
```

```
String client_id = "esp32";
    //client_id += String(WiFi.macAddress());
    Serial.printf("The client %s connects to the public mqtt broker\n", client_id.c_str());
    if (client.connect(client_id.c_str())) {
      Serial.println("MQTT broker connected");
    } else {
      Serial.print("\n failed with state ");
      Serial.print(client.state());
      delay(2000);
    }
  }
 }
//**************************
 void loop() {
   float sensor_1 = 0;
   float sensor_2 = 0;
   float sensor_3 = 0;
   float sensor_4 = 0;
   float sensor_5 = 0;
   float sensor_6 = 0;
   float sensor_7 = 0;
   float sensor_8 = 0;
   float sensor_9 = 0;
```

```
//Calibrate vlaues
float calibrate_S1 = 2.45;
float calibrate_S2 = 1.64;
float calibrate_S3 = 1.25;
float calibrate_S4 = 0.69;
float calibrate_S5 = 0.40;
float calibrate_S6 = 0.89;
float calibrate_S7 = 0.40;
float calibrate_S8 = 1.11;
float calibrate_S9 = 0.91;
float sensor_area = 0.0001267278;
for(int i=0; i \le 60; i++){
 int16_t adc0 = ads.readADC_SingleEnded(0); // Read analog value from channel A0
 int16_t adc1 = ads.readADC_SingleEnded(1); // Read analog value from channel A1
 int16_t adc2 = ads.readADC_SingleEnded(2); // Read analog value from channel A2
 //Sensor 9
 Serial.print("Sensor_9:");
 Serial.println(analogRead(sensor9));
 Serial.print("Pressure ");
 Serial.print(i);
 Serial.print(": ");
 Serial.println(analogRead(sensor9));
```

```
sensor_9 = sensor_9 + analogRead(sensor9);
//Sensor 8
Serial.print("Sensor_8:");
Serial.println(analogRead(sensor8));
Serial.print("Pressure ");
Serial.print(i);
Serial.print(": ");
Serial.println(analogRead(sensor8));
sensor_8 = sensor_8 + analogRead(sensor8);
//Sensor 7
Serial.print("Sensor_7:");
Serial.println(analogRead(sensor7));
Serial.print("Pressure ");
Serial.print(i);
Serial.print(": ");
Serial.println(analogRead(sensor7));
sensor_7 = sensor_7 + analogRead(sensor7);
//Sensor 6
Serial.print("Sensor_6:");
Serial.println(analogRead(sensor6));
```

```
Serial.print("Pressure ");
Serial.print(i);
Serial.print(": ");
Serial.println(analogRead(sensor6));
sensor_6 = sensor_6 + analogRead(sensor6);
//Sensor 5
Serial.print("Sensor_5:");
Serial.println(analogRead(sensor5));
Serial.println(analogRead(25));
Serial.print("Pressure ");
Serial.print(i);
Serial.print(": ");
Serial.println(analogRead(sensor5));
sensor_5 = sensor_5 + analogRead(sensor5);
//Sensor 4
Serial.print("Sensor_4:");
Serial.println(analogRead(sensor4));
Serial.print("Pressure ");
Serial.print(i);
Serial.print(": ");
Serial.println(analogRead(sensor4));
```

```
sensor_4 = sensor_4 + analogRead(sensor4);
//Sensor 3
Serial.print("Sensor_3:");
Serial.println(adc0);
Serial.print("Pressure ");
Serial.print(i);
Serial.print(": ");
Serial.println(adc0);
sensor_3 = sensor_3 + adc0;
//Sensor 2
Serial.print("Sensor_2:");
Serial.println(adc1);
Serial.print("Pressure ");
Serial.print(i);
Serial.print(": ");
Serial.println(adc1);
sensor_2 = sensor_2 + adc1;
//Sensor 1
Serial.print("Sensor_1:");
Serial.println(adc2);
```

```
Serial.print("Pressure ");
 Serial.print(i);
 Serial.print(": ");
 Serial.println(adc2);
 sensor_1 = sensor_1 + adc2;
 Serial.println("-----");
 delay(1000);
sensor_1 = sensor_1/calibrate_S1;
sensor_1 = sensor_1/sensor_area;
sensor_2 = sensor_2/calibrate_S2;
sensor_2 = sensor_2/sensor_area;
sensor_3 = sensor_3/calibrate_S3;
sensor_3 = sensor_3/sensor_area;
sensor_4 = sensor_4/calibrate_S4;
sensor_4 = sensor_4/sensor_area;
sensor_5 = sensor_5/calibrate_S5;
sensor_5 = sensor_5/sensor_area;
sensor_6 = sensor_6/calibrate_S6;
sensor_6 = sensor_6/sensor_area;
```

```
sensor_7 = sensor_7/calibrate_S7;
   sensor_7 = sensor_7/sensor_area;
   sensor_8 = sensor_8/calibrate_S8;
   sensor_8 = sensor_8/sensor_area;
   sensor_9 = sensor_9/calibrate_S9;
   sensor_9 = sensor_9/sensor_area;
   client.publish("sensor/1", String(sensor_1).c_str());
   client.publish("sensor/2", String(sensor_2).c_str());
   client.publish("sensor/3", String(sensor_3).c_str());
   client.publish("sensor/4", String(sensor_4).c_str());
   client.publish("sensor/5", String(sensor_5).c_str());
   client.publish("sensor/6", String(sensor_6).c_str());
   client.publish("sensor/7", String(sensor_7).c_str());
   client.publish("sensor/8", String(sensor_8).c_str());
   client.publish("sensor/9", String(sensor_9).c_str());
   delay(1000);
  }
//*********************************
```

}

Appendix B: Code Segment on Interface 1

```
import React from "react";
import Header from "../components/Header";
import { useNavigate } from "react-router-dom";
import "../styles/styles.css";

function Interface1() {
  const navigate = useNavigate();

  const handleClick = () => {
    navigate("/interface2");
  };
  const handleClick2 = () => {
    navigate("/interface3");
  };
};
```

```
return (
  <div className="maindiv">
   <Header/>
   <div className="maindiv1">
    <div className="maindiv2">
     <div>
      INSOLE 1.0v
      <div className="maindiv3">
       <button className="button1" onClick={handleClick}>
        FOOT TYPE
       </button>
       <button className="button1" onClick={handleClick2}>
        SPORT MODE
       </button>
      </div>
     </div>
    </div>
   </div>
  </div>
);
export default Interface1;
Appendix C: Code Segment on Interface 2
import React from "react";
import Header from "../components/Header";
import { useNavigate } from "react-router-dom";
```

```
function Interface2() {
const navigate = useNavigate();
const handleClick = () => {
 navigate("/interface4");
 };
return (
 <div className="maindiv">
  <Header/>
  <div className="maindiv1">
   <div className="maindiv2">
    <div>
     <div className="maindiv4">
      <div className="maindiv6">
       NAME
       <input className="input1"></input>
      </div>
      <div className="maindiv6">
       AGE
       <input className="input1"></input>
      </div>
      <div className="maindiv6">
       WEIGTH
       <input className="input1"></input>
      </div>
     </div>
```

Appendix D: Code Segment on Interface 3

```
import React, { useState, useEffect } from "react";
import Header from "../components/Header";
import { useNavigate } from "react-router-dom";
import { projectFirestore } from "../components/firebase-config";
import { ref, onValue, push, set } from "firebase/database";

function Interface3() {
   const navigate = useNavigate();
   const SportRef = ref(projectFirestore, "sensor/Sport");
   const [name, setName] = useState();
   const [sport, setSport] = useState();
   const [position, setPosition] = useState();
```

```
const [age, setAge] = useState();
const [gender, setGender] = useState();
const [weight, setWeight] = useState();
const handleClick = async (e) => {
 e.preventDefault();
 if (!name || !sport || !position || !age || !gender || !weight) {
  alert("Please fill in all the fields.");
  return;
 }
 try {
  // Add a new sport to the Firestore collection
  const newSportRef = push(SportRef, {
   Name: name,
   Sport: sport,
   Position: position,
   Age: age,
   Gender: gender,
   Weight: weight,
  });
  const snapshot = await newSportRef; // Wait for the promise to resolve
  const newSportKey = snapshot.key; // Get the unique ID (key) generated by Firebase
  console.log(newSportKey);
  await set(ref(projectFirestore, `sensor/startStop`), {
   value: 1,
   sportId: newSportKey,
  });
  // Optionally, you can clear the form after submitting
```

```
alert("Sport Mode Started Successfully!"); // Set the success message
  navigate("/interface4", {
   state: {
    sportId: newSportKey,
   },
  });
  // Optionally, you can clear the success message after a few seconds
  // Optionally, you can navigate to a different page or show a success message
 } catch (error) {
  // Handle the error (you can show an error message to the user)
  console.error("Error Starting data collection:", error.message);
 }
};
return (
 <div className="maindiv">
  <Header/>
  <div className="maindiv1">
   <div className="maindiv2">
    <div>
      <div className="maindiv7">
       <div className="maindiv6">
        NAME
        <input
         className="input1"
         type="text"
```

```
id="name"
 name="name"
  value={name}
  onChange=\{(e) => \{
  setName(e.target.value);
  console.log("Name:", name);
  }}
></input>
</div>
<div className="maindiv6">
SPORT
<input
 className="input1"
 type="text"
 id="name"
 name="name"
  value={sport}
  onChange=\{(e) => \{
  setSport(e.target.value);
  console.log("sport:", sport);
  }}
></input>
</div>
<div className="maindiv6">
POSITION
<input
 className="input1"
 type="text"
```

```
id="name"
 name="name"
  value={position}
  onChange=\{(e) => \{
  setPosition(e.target.value);
  console.log("position:", position);
  }}
></input>
</div>
<div className="maindiv6">
AGE
<input
 className="input1"
 type="text"
 id="name"
 name="name"
  value={age}
  onChange=\{(e) => \{
  setAge(e.target.value);
  console.log("age:", age);
  }}
></input>
</div>
<div className="maindiv6">
WEIGHT
<input
 className="input1"
 type="text"
```

```
id="name"
  name="name"
   value={weight}
   onChange=\{(e) => \{
    setWeight(e.target.value);
    console.log("weight:", weight);
   }}
 ></input>
</div>
<div className="maindiv6">
  GENDER
  <input
  className="input1"
  type="text"
  id="name"
  name="name"
   value={gender}
   onChange=\{(e) => \{
    setGender(e.target.value);
    console.log("Gender:", gender);
   }}
 ></input>
</div>
</div>
<div className="maindiv8">
<button className="button1" onClick={handleClick}>
 START
</button>
```

```
</div>
</div>
</div>
</div>
</div>
</div>
);
}
export default Interface3;
```

Appendix E: Code Segment on Interface 4

```
import React, { useState, useEffect } from "react";
import Header from "../components/Header";
import { useNavigate } from "react-router-dom";
import { projectFirestore } from "../components/firebase-config";
import { ref, onValue, push, set } from "firebase/database";

function Interface3() {
   const navigate = useNavigate();
   const SportRef = ref(projectFirestore, "sensor/Sport");
   const [name, setName] = useState();
   const [sport, setSport] = useState();
   const [position, setPosition] = useState();
   const [gender, setGender] = useState();
   const [weight, setWeight] = useState();
   const handleClick = async (e) => {
```

```
e.preventDefault();
if (!name || !sport || !position || !age || !gender || !weight) {
 alert("Please fill in all the fields.");
 return;
}
try {
 // Add a new sport to the Firestore collection
 const newSportRef = push(SportRef, {
  Name: name,
  Sport: sport,
  Position: position,
  Age: age,
  Gender: gender,
  Weight: weight,
 });
 const snapshot = await newSportRef; // Wait for the promise to resolve
 const newSportKey = snapshot.key; // Get the unique ID (key) generated by Firebase
 console.log(newSportKey);
 await set(ref(projectFirestore, `sensor/startStop`), {
  value: 1,
  sportId: newSportKey,
 });
 // Optionally, you can clear the form after submitting
 alert("Sport Mode Started Successfully!"); // Set the success message
 navigate("/interface4", {
  state: {
   sportId: newSportKey,
```

```
},
  });
  // Optionally, you can clear the success message after a few seconds
  // Optionally, you can navigate to a different page or show a success message
 } catch (error) {
  // Handle the error (you can show an error message to the user)
  console.error("Error Starting data collection:", error.message);
 }
};
return (
 <div className="maindiv">
  <Header/>
  <div className="maindiv1">
   <div className="maindiv2">
    <div>
      <div className="maindiv7">
      <div className="maindiv6">
        NAME
        <input
         className="input1"
         type="text"
         id="name"
         name="name"
         value={name}
         onChange=\{(e) => \{
```

```
setName(e.target.value);
  console.log("Name:", name);
  }}
></input>
</div>
<div className="maindiv6">
SPORT
<input
 className="input1"
 type="text"
 id="name"
  name="name"
  value={sport}
  onChange=\{(e) => \{
  setSport(e.target.value);
  console.log("sport:", sport);
  }}
></input>
</div>
<div className="maindiv6">
POSITION
<input
 className="input1"
 type="text"
 id="name"
 name="name"
  value={position}
  onChange=\{(e) => \{
```

```
setPosition(e.target.value);
  console.log("position:", position);
  }}
></input>
</div>
<div className="maindiv6">
AGE
<input
 className="input1"
 type="text"
 id="name"
  name="name"
  value={age}
  onChange=\{(e) => \{
  setAge(e.target.value);
  console.log("age:", age);
  }}
></input>
</div>
<div className="maindiv6">
WEIGHT
 <input
 className="input1"
 type="text"
 id="name"
 name="name"
  value={weight}
 onChange=\{(e) => \{
```

```
setWeight(e.target.value);
       console.log("weight:", weight);
      }}
     ></input>
    </div>
    <div className="maindiv6">
     GENDER
     <input
      className="input1"
      type="text"
      id="name"
      name="name"
      value={gender}
      onChange=\{(e) => \{
       setGender(e.target.value);
       console.log("Gender:", gender);
      }}
     ></input>
    </div>
   </div>
   <div className="maindiv8">
    <button className="button1" onClick={handleClick}>
     START
    </button>
   </div>
  </div>
 </div>
</div>
```

```
</div>
);
}
export default Interface3;
```

Appendix F: Code Segment on My Linechart

```
import React, { useState, useEffect } from "react";
import {
LineChart,
Line,
 XAxis,
 YAxis,
 CartesianGrid,
 Tooltip,
Legend,
} from "recharts";
const\ MyLineChart = (\{\ sensorData\ \}) => \{
 return (
  <LineChart width={720} height={410} data={sensorData}>
   <XAxis dataKey="time" />
   <YAxis/>
   <CartesianGrid stroke="#ccc"/>
   <Tooltip/>
   <Legend />
```

```
<Line
 type="monotone"
 dataKey="sensor1"
 stroke="#8884d8"
 name="Sensor 1"
/>
<Line
 type="monotone"
 dataKey="sensor2"
 stroke="#82ca9d"
 name="Sensor 2"
/>
<Line
type="monotone"
 dataKey="sensor3"
 stroke="#ff0000"
 name="Sensor 3"
/>
<Line
 type="monotone"
 dataKey="sensor4"
 stroke="#00ff00"
 name="Sensor 4"
/>
<Line
 type="monotone"
 dataKey="sensor5"
 stroke="#0000ff"
```

```
name="Sensor 5"
 />
 <Line
 type="monotone"
 dataKey="sensor6"
  stroke="#ffa500"
  name="Sensor 6"
 />
 <Line
 type="monotone"
 dataKey="sensor7"
  stroke="#800080"
 name="Sensor 7"
 />
 <Line
 type="monotone"
  dataKey="sensor8"
  stroke="#008080"
 name="Sensor 8"
 />
 <Line
 type="monotone"
 dataKey="sensor9"
  stroke="#ff00ff"
  name="Sensor 9"
 />
</LineChart>
```

);

```
};
```

export default MyLineChart;

Appendix G: Code Segment on Flows

```
[
  {
     "id": "692a8e81702f3975",
     "type": "tab",
     "label": "Flow 1",
     "disabled": false,
     "info": "",
     "env": []
  },
  {
     "id": "aab1d96254953d12",
     "type": "mqtt in",
     "z": "692a8e81702f3975",
     "name": "",
     "topic": "sensor/1",
     "qos": "1",
     "datatype": "auto-detect",
     "broker": "98c79337c7b7ce98",
     "nl": false,
     "rap": true,
     "rh": 0,
```

```
"inputs": 0,
  "x": 720,
  "y": 240,
  "wires": [
    [
       "44842597bf7ed96f",
       "d8775f67242322fa",
       "b0e843d5ff119532"
    ]
  ]
},
  "id": "889790e1ba5d4f6f",
  "type": "mqtt in",
  "z": "692a8e81702f3975",
  "name": "",
  "topic": "sensor/2",
  "qos": "1",
  "datatype": "auto-detect",
  "broker": "98c79337c7b7ce98",
  "nl": false,
  "rap": true,
  "rh": 0,
  "inputs": 0,
  "x": 720,
  "y": 380,
  "wires": [
    [
```

```
"8e046c75104a0bd8",
       "b190ac443d2845fb"
    ]
  ]
},
  "id": "9e6e8d2e4b69b59f",
  "type": "mqtt in",
  "z": "692a8e81702f3975",
  "name": "",
  "topic": "sensor/3",
  "qos": "1",
  "datatype": "auto-detect",
  "broker": "98c79337c7b7ce98",
  "nl": false,
  "rap": true,
  "rh": 0,
  "inputs": 0,
  "x": 720,
  "y": 540,
  "wires": [
    [
      "5fa8aa569af86621",
      "2298b9124627c5a6"
    ]
  ]
},
```

```
"id": "2116886b01913b17",
  "type": "mqtt in",
  "z": "692a8e81702f3975",
  "name": "",
  "topic": "sensor/4",
  "qos": "1",
  "datatype": "auto-detect",
  "broker": "98c79337c7b7ce98",
  "nl": false,
  "rap": true,
  "rh": 0,
  "inputs": 0,
  "x": 720,
  "y": 680,
  "wires": [
    [
       "08b84a847dc33749",
       "d09ec1f8068f08a2"
    ]
 ]
},
  "id": "0a7bcc723bb248a6",
  "type": "mqtt in",
  "z": "692a8e81702f3975",
  "name": "",
  "topic": "sensor/5",
  "qos": "1",
```

```
"datatype": "auto-detect",
  "broker": "98c79337c7b7ce98",
  "nl": false,
  "rap": true,
  "rh": 0,
  "inputs": 0,
  "x": 720,
  "y": 820,
  "wires": [
    [
       "a291f46cee41a279",
       "657e81797281d544"
    ]
  ]
},
  "id": "6b23f82cb9c7ea01",
  "type": "mqtt in",
  "z": "692a8e81702f3975",
  "name": "",
  "topic": "sensor/6",
  "qos": "1",
  "datatype": "auto-detect",
  "broker": "98c79337c7b7ce98",
  "nl": false,
  "rap": true,
  "rh": 0,
  "inputs": 0,
```

```
"x": 720,
  "y": 960,
  "wires": [
    [
       "ecb5a3c2bd35ef1e",
      "3df104e45c4794da"
    ]
  ]
},
  "id": "4ee32472f1702910",
  "type": "mqtt in",
  "z": "692a8e81702f3975",
  "name": "",
  "topic": "sensor/7",
  "qos": "1",
  "datatype": "auto-detect",
  "broker": "98c79337c7b7ce98",
  "nl": false,
  "rap": true,
  "rh": 0,
  "inputs": 0,
  "x": 720,
  "y": 1120,
  "wires": [
    [
       "86145416f7a43dc9",
       "85e48e42cf03c950"
```

```
]
  ]
},
  "id": "cec20588985cf0a5",
  "type": "mqtt in",
  "z": "692a8e81702f3975",
  "name": "",
  "topic": "sensor/8",
  "qos": "1",
  "datatype": "auto-detect",
  "broker": "98c79337c7b7ce98",
  "nl": false,
  "rap": true,
  "rh": 0,
  "inputs": 0,
  "x": 720,
  "y": 1260,
  "wires": [
    [
       "836b7d8a035c08f0",
       "b6cf1c92dc728b23"
    ]
  ]
},
  "id": "768f352bb1e84132",
  "type": "mqtt in",
```

```
"z": "692a8e81702f3975",
  "name": "",
  "topic": "sensor/9",
  "qos": "1",
  "datatype": "auto-detect",
  "broker": "98c79337c7b7ce98",
  "nl": false,
  "rap": true,
  "rh": 0,
  "inputs": 0,
  "x": 720,
  "y": 1400,
  "wires": [
       "2ca8970d56179557",
       "3f67aecfaf7397bc"
    ]
  ]
},
  "id": "d8775f67242322fa",
  "type": "firebase modify",
  "z": "692a8e81702f3975",
  "name": "Pic-sensor1",
  "firebaseconfig": "",
  "childpath": "pic-sensor/sensor1",
  "method": "set",
  "value": "msg.payload",
```

```
"priority": "msg.priority",
  "x": 910,
  "y": 200,
  "wires": [
    []
  1
},
  "id": "2298b9124627c5a6",
  "type": "firebase modify",
  "z": "692a8e81702f3975",
  "name": "Pic-sensor3",
  "firebaseconfig": "",
  "childpath": "pic-sensor/sensor3",
  "method": "set",
  "value": "msg.payload",
  "priority": "msg.priority",
  "x": 910,
  "y": 500,
  "wires": [
    []
  ]
},
  "id": "b190ac443d2845fb",
  "type": "firebase modify",
  "z": "692a8e81702f3975",
  "name": "Pic-sensor2",
```

```
"firebaseconfig": "",
  "childpath": "pic-sensor/sensor2",
  "method": "set",
  "value": "msg.payload",
  "priority": "msg.priority",
  "x": 910,
  "y": 340,
  "wires": [
    []
  ]
},
  "id": "d09ec1f8068f08a2",
  "type": "firebase modify",
  "z": "692a8e81702f3975",
  "name": "Pic-sensor4",
  "firebaseconfig": "",
  "childpath": "pic-sensor/sensor4",
  "method": "set",
  "value": "msg.payload",
  "priority": "msg.priority",
  "x": 910,
  "y": 640,
  "wires": [
    []
  ]
},
```

```
"id": "657e81797281d544",
  "type": "firebase modify",
  "z": "692a8e81702f3975",
  "name": "Pic-sensor5",
  "firebaseconfig": "",
  "childpath": "pic-sensor/sensor5",
  "method": "set",
  "value": "msg.payload",
  "priority": "msg.priority",
  "x": 910,
  "y": 780,
  "wires": [
    []
  ]
},
  "id": "3df104e45c4794da",
  "type": "firebase modify",
  "z": "692a8e81702f3975",
  "name": "Pic-sensor6",
  "firebaseconfig": "",
  "childpath": "pic-sensor/sensor6",
  "method": "set",
  "value": "msg.payload",
  "priority": "msg.priority",
  "x": 910,
  "y": 920,
  "wires": [
```

```
[]
 ]
},
  "id": "85e48e42cf03c950",
  "type": "firebase modify",
  "z": "692a8e81702f3975",
  "name": "Pic-sensor7",
  "firebaseconfig": "",
  "childpath": "pic-sensor/sensor7",
  "method": "set",
  "value": "msg.payload",
  "priority": "msg.priority",
  "x": 910,
  "y": 1080,
  "wires": [
    []
  ]
},
  "id": "b6cf1c92dc728b23",
  "type": "firebase modify",
  "z": "692a8e81702f3975",
  "name": "Pic-sensor8",
  "firebaseconfig": "",
  "childpath": "pic-sensor/sensor8",
  "method": "set",
  "value": "msg.payload",
```

```
"priority": "msg.priority",
  "x": 910,
  "y": 1220,
  "wires": [
    []
  1
},
  "id": "3f67aecfaf7397bc",
  "type": "firebase modify",
  "z": "692a8e81702f3975",
  "name": "Pic-sensor9",
  "firebaseconfig": "",
  "childpath": "pic-sensor/sensor9",
  "method": "set",
  "value": "msg.payload",
  "priority": "msg.priority",
  "x": 910,
  "y": 1360,
  "wires": [
    []
  ]
},
  "id": "5e2a0819ae2469f9",
  "type": "firebase.on",
  "z": "692a8e81702f3975",
  "name": "firebase_OnOff",
```

```
"firebaseconfig": "",
  "childpath": "/sensor/startStop/value",
  "atStart": true,
  "eventType": "value",
  "queries": [],
  "x": 1160,
  "y": 80,
  "wires": [
    [
       "0d1ca950f5f21a22",
       "7eb46b2d5e45df09"
    ]
  ]
},
  "id": "0d1ca950f5f21a22",
  "type": "debug",
  "z": "692a8e81702f3975",
  "name": "debug 13",
  "active": false,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "payload",
  "targetType": "msg",
  "statusVal": "",
  "statusType": "auto",
  "x": 1420,
```

```
"y": 120,
     "wires": []
   },
     "id": "7eb46b2d5e45df09",
     "type": "function",
     "z": "692a8e81702f3975",
     "name": "function 1",
     "func": "if (msg.payload === 1) \{\n global.set(\"mainstatus\", 1);\n} else \{\n
mainstatus \ | \ mainstatus: \ global.get(\ ''mainstatus \ '') \ // \ Add \ mainstatus \ to
the message\n};\nnreturn newMsg;\n",
     "outputs": 1,
     "noerr": 0,
     "initialize": "",
     "finalize": "",
     "libs": [],
     "x": 1420,
     "y": 60,
     "wires": [
       [
          "5b896169885eacc2"
       ]
     ]
   },
     "id": "44842597bf7ed96f",
     "type": "function",
     "z": "692a8e81702f3975",
```

```
"name": "sensor1",
     msg; \ \ n",
     "outputs": 1,
     "noerr": 0,
     "initialize": "",
     "finalize": "",
     "libs": [],
     "x": 900,
     "y": 240,
     "wires": [
       [
          "f5927da006f2acc5"
       ]
     1
    },
     "id": "8e046c75104a0bd8",
     "type": "function",
     "z": "692a8e81702f3975",
     "name": "sensor2",
     "func": "var sensor02value = msg.payload;\nmsg.sensor2 = sensor02value;\nreturn
msg; n",
     "outputs": 1,
     "noerr": 0,
     "initialize": "",
     "finalize": "",
     "libs": [],
```

```
"x": 900,
      "y": 380,
      "wires": [
         [
           "9828c98405b7be8c"
         ]
      ]
    },
    {
      "id": "5fa8aa569af86621",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "sensor3",
      "func": "var sensor03value = msg.payload;\nmsg.sensor3 = sensor03value;\nreturn
msg;\n",
      "outputs": 1,
      "noerr": 0,
      "initialize": "",
      "finalize": "",
      "libs": [],
      "x": 900,
      "y": 540,
      "wires": [
         [
           "7e0e316e37704392"
         ]
      ]
    },
```

```
{
      "id": "08b84a847dc33749",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "sensor4",
      "func": "var sensor04value = msg.payload; \nmsg.sensor4 = sensor04value; \nreturn
msg;\n'',
      "outputs": 1,
      "noerr": 0,
      "initialize": "",
      "finalize": "",
      "libs": [],
      "x": 900,
      "y": 680,
      "wires": [
        [
           "44cb6307237beede"
        ]
      ]
    },
      "id": "a291f46cee41a279",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "sensor5",
      "func": "var sensor05value = msg.payload;\nmsg.sensor5 = sensor05value;\nreturn
msg;\n",
      "outputs": 1,
```

```
"noerr": 0,
       "initialize": "",
      "finalize": "",
      "libs": [],
       "x": 900,
      "y": 820,
       "wires": [
         [
            "839b7ff7ab9e0719"
         ]
      ]
    },
      "id": "ecb5a3c2bd35ef1e",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "sensor6",
       "func": "var sensor06value = msg.payload;\nmsg.sensor6 = sensor06value;\nreturn
msg;\n",
       "outputs": 1,
       "noerr": 0,
      "initialize": "",
      "finalize": "",
       "libs": [],
      "x": 900,
      "y": 960,
       "wires": [
         [
```

```
"6d7a9ca191feb608"
        ]
      ]
    },
      "id": "86145416f7a43dc9",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "sensor7",
      "func": "var sensor07value = msg.payload;\nmsg.sensor7 = sensor07value;\nreturn
msg;\n",
      "outputs": 1,
      "noerr": 0,
      "initialize": "",
      "finalize": "",
      "libs": [],
      "x": 900,
      "y": 1120,
      "wires": [
        [
           "e6b89d40e15d08db"
        ]
      ]
    },
      "id": "836b7d8a035c08f0",
      "type": "function",
      "z": "692a8e81702f3975",
```

```
"name": "sensor8",
       "func": "var sensor08value = msg.payload;\nmsg.sensor8 = sensor08value;\nreturn
msg; \ \ n",
       "outputs": 1,
       "noerr": 0,
       "initialize": "",
      "finalize": "",
       "libs": [],
       "x": 900,
       "y": 1260,
       "wires": [
         [
            "5f1c885c749ffce9"
         ]
      1
    },
       "id": "2ca8970d56179557",
       "type": "function",
      "z": "692a8e81702f3975",
       "name": "sensor9",
       "func": "var sensor09value = msg.payload;\nmsg.sensor9 = sensor09value;\nreturn
msg;\n",
       "outputs": 1,
       "noerr": 0,
       "initialize": "",
       "finalize": "",
       "libs": [],
```

```
"x": 900,
  "y": 1400,
  "wires": [
    [
       "7b6fb690a73975b3"
    ]
  ]
},
{
  "id": "5b896169885eacc2",
  "type": "debug",
  "z": "692a8e81702f3975",
  "name": "debug 21",
  "active": false,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "true",
  "targetType": "full",
  "statusVal": "",
  "statusType": "auto",
  "x": 1600,
  "y": 60,
  "wires": []
},
  "id": "f507a9be55c4ea7c",
  "type": "debug",
```

```
"z": "692a8e81702f3975",
  "name": "debug 2",
  "active": true,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "payload",
  "targetType": "msg",
  "statusVal": "",
  "statusType": "auto",
  "x": 1900,
  "y": 220,
  "wires": []
},
  "id": "eba3298b6d7d8e36",
  "type": "firebase modify",
  "z": "692a8e81702f3975",
  "name": "firebase_sensor1",
  "firebaseconfig": "",
  "childpath": "msg.childpath",
  "method": "push",
  "value": "msg.payload",
  "priority": "msg.priority",
  "x": 1910,
  "y": 280,
  "wires": [
    []
```

```
]
    },
      "id": "e9434ba2ff86fbac",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "sensor1Input",
      "func": "var sensor01 = global.get(\"sensor/1\")\nmsg.sensor<math>01 = sensor 01\n
msg;",
      "outputs": 1,
      "noerr": 0,
      "initialize": "",
      "finalize": "",
      "libs": [],
      "x": 1510,
      "y": 240,
      "wires": [
         [
           "fe3f642f54c9c4af"
         ]
      ]
    },
      "id": "fe3f642f54c9c4af",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "Format Time",
```

"func": "var childpath1 = global.get(\"childpathvariable\");\nvar sensorValue = msg.sensor01;\n\n\/ Create a new JavaScript Date object to get the current timestamp\nvar timestamp = Date.now();\n// Create a new payload object with the sensor value and timestamp\nvar newPayload = $\{\n value : sensorValue,\n timestamp: timestamp\n\};\nmsg.payload = newPayload;\nmsg.childpath= \"sensor/Sport/\" +childpath1+\"/sensor1\";\n// Set the new payload object\n// Send the modified message to the next node (Firebase)\nreturn msg;",$

```
"outputs": 1,
  "noerr": 0,
  "initialize": "",
  "finalize": "",
  "libs": [],
  "x": 1690,
  "y": 280,
  "wires": [
    [
       "f507a9be55c4ea7c",
       "eba3298b6d7d8e36"
    ]
  ]
},
  "id": "1c09af56f642df8e",
  "type": "firebase.on",
  "z": "692a8e81702f3975",
  "name": "firbaseChildPath",
  "firebaseconfig": "",
  "childpath": "/sensor/startStop/sportId",
  "atStart": true,
```

```
"eventType": "value",
     "queries": [],
     "x": 1140,
     "y": 280,
     "wires": [
       [
         "70bb114383feff84"
       ]
     ]
   },
   {
     "id": "f5927da006f2acc5",
     "type": "function",
     "z": "692a8e81702f3975",
     "name": "Main Function1",
     "func": "var onoffstatus = global.get(\"mainstatus\")\nvar sensor1 = msg.sensor1\n\nif
onoffstatus: onoffstatus,\n
                        sensor1: sensor1,\n \};\n\n // Output the debug message\n
"outputs": 1,
     "noerr": 0,
     "initialize": "",
     "finalize": "",
     "libs": [],
     "x": 1140,
     "y": 240,
     "wires": [
       [
         "e9434ba2ff86fbac"
```

```
]
      ]
    },
      "id": "70bb114383feff84",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "function 2",
      "func": "var childpathvalue = global.set(\"childpathvariable\",
msg.payload)\nmsg.childpath = childpathvalue;\nreturn msg;\n",
      "outputs": 1,
      "noerr": 0,
      "initialize": "",
      "finalize": "",
      "libs": [],
      "x": 1320,
      "y": 280,
      "wires": [
         [
           "fe3f642f54c9c4af"
         ]
      ]
    },
      "id": "b0e843d5ff119532",
      "type": "debug",
      "z": "692a8e81702f3975",
      "name": "debug 30",
```

```
"active": true,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "payload",
  "targetType": "msg",
  "statusVal": "",
  "statusType": "auto",
  "x": 900,
  "y": 140,
  "wires": []
},
  "id": "b3bb84a2cc616237",
  "type": "debug",
  "z": "692a8e81702f3975",
  "name": "debug 31",
  "active": false,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "payload",
  "targetType": "msg",
  "statusVal": "",
  "statusType": "auto",
  "x": 1880,
  "y": 380,
  "wires": []
```

```
},
    {
      "id": "3b5bd0f80d69559c",
      "type": "firebase modify",
      "z": "692a8e81702f3975",
      "name": "firebase_sensor2",
      "firebaseconfig": "",
      "childpath": "msg.childpath",
      "method": "push",
      "value": "msg.payload",
      "priority": "msg.priority",
      "x": 1910,
      "y": 420,
      "wires": [
         ]
    },
    {
      "id": "49a17b0e938647cc",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "sensor2Input",
      "func": "var sensor02 = global.get(\"sensor/2\")\nmsg.sensor<math>02 = sensor 02\n\return
msg;",
      "outputs": 1,
      "noerr": 0,
      "initialize": "",
      "finalize": "",
```

```
"libs": [],
      "x": 1510,
      "y": 380,
      "wires": [
        [
           "30128a9a41fcd520"
        ]
      ]
    },
      "id": "30128a9a41fcd520",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "Format Time",
      "func": "var childpath1 = global.get(\"childpathvariable\");\nvar sensorValue =
msg.sensor02;\n\n// Create a new JavaScript Date object to get the current timestamp\nvar
timestamp = Date.now();\n// Create a new payload object with the sensor value and
timestamp\nvar newPayload = {\n value : sensorValue,\n timestamp:}
timestamp\n;\nmsg.payload = newPayload;\nmsg.childpath= \"sensor/Sport\\"
+childpath1+\"/sensor2\";\n// Set the new payload object\n// Send the modified message to the
next node (Firebase)\nreturn msg;",
      "outputs": 1,
      "noerr": 0,
      "initialize": "",
      "finalize": "",
      "libs": [],
      "x": 1690,
      "y": 420,
      "wires": [
```

```
[
       "b3bb84a2cc616237",
       "3b5bd0f80d69559c"
    ]
  ]
},
  "id": "c148857fd2161a63",
  "type": "firebase.on",
  "z": "692a8e81702f3975",
  "name": "firbaseChildPath",
  "firebaseconfig": "",
  "childpath": "/sensor/startStop/sportId",
  "atStart": true,
  "eventType": "value",
  "queries": [],
  "x": 1140,
  "y": 420,
  "wires": [
    [
       "9fe7c8077f455661"
    ]
  ]
},
  "id": "9828c98405b7be8c",
  "type": "function",
  "z": "692a8e81702f3975",
```

```
"name": "Main Function2",
     "func": "var onoffstatus = global.get(\"mainstatus\")\nvar sensor2 = msg.sensor2\n\nif
onoffstatus: onoffstatus,\n
                         sensor2: sensor2,\n \};\n\n // Output the debug message\n
"outputs": 1,
     "noerr": 0,
     "initialize": "",
     "finalize": "",
     "libs": [],
     "x": 1140,
     "y": 380,
     "wires": [
       [
         "49a17b0e938647cc"
       ]
     ]
   },
     "id": "9fe7c8077f455661",
     "type": "function",
     "z": "692a8e81702f3975",
     "name": "function 8",
     "func": "var childpathvalue = global.set(\"childpathvariable\",
msg.payload)\nmsg.childpath = childpathvalue;\nreturn msg;\n",
     "outputs": 1,
     "noerr": 0,
     "initialize": "",
     "finalize": "",
```

```
"libs": [],
  "x": 1320,
  "y": 420,
  "wires": [
    [
       "30128a9a41fcd520"
    ]
  ]
},
  "id": "867cd46d4c1f3c67",
  "type": "debug",
  "z": "692a8e81702f3975",
  "name": "debug 32",
  "active": false,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "payload",
  "targetType": "msg",
  "statusVal": "",
  "statusType": "auto",
  "x": 1880,
  "y": 540,
  "wires": []
},
  "id": "7e48c4ed7abf2639",
```

```
"type": "firebase modify",
      "z": "692a8e81702f3975",
      "name": "firebase_sensor3",
      "firebaseconfig": "",
      "childpath": "msg.childpath",
      "method": "push",
      "value": "msg.payload",
      "priority": "msg.priority",
      "x": 1910,
      "y": 580,
      "wires": [
         []
      1
    },
      "id": "8c44d42feb54c70b",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "sensor3Input",
      "func": "var sensor03 = global.get(\"sensor/3\")\nmsg.sensor<math>03 = sensor03\n\return
msg;",
      "outputs": 1,
      "noerr": 0,
      "initialize": "",
      "finalize": "",
      "libs": [],
      "x": 1510,
      "y": 540,
```

```
"wires": [
                              [
                                       "7243fbb04788026e"
                              ]
                      ]
               },
               {
                      "id": "7243fbb04788026e",
                      "type": "function",
                      "z": "692a8e81702f3975",
                      "name": "Format Time",
                      "func": "var childpath1 = global.get(\"childpathvariable\");\nvar sensorValue =
msg.sensor03;\n\n// Create a new JavaScript Date object to get the current timestamp\nvar
timestamp = Date.now();\n// Create a new payload object with the sensor value and
timestamp\nvar newPayload = {\nvalue: sensorValue,\nvalue: sensorValue: sensorValue,\nvalue: sensorValue: sensorValue: sensorValue: s
timestamp\n;\nmsg.payload = newPayload;\nmsg.childpath = \"sensor/Sport\\" + childpath1
+ \"/sensor3\";\n// Set the new payload object\n// Send the modified message to the next node
(Firebase)\nreturn msg;",
                      "outputs": 1,
                      "noerr": 0,
                      "initialize": "",
                      "finalize": "",
                      "libs": [],
                      "x": 1690,
                      "y": 580,
                      "wires": [
                              [
                                       "867cd46d4c1f3c67",
                                       "7e48c4ed7abf2639"
```

```
]
     ]
   },
     "id": "b55ad40b9834e9c2",
     "type": "firebase.on",
     "z": "692a8e81702f3975",
     "name": "firbaseChildPath",
     "firebaseconfig": "",
     "childpath": "/sensor/startStop/sportId",
     "atStart": true,
     "eventType": "value",
     "queries": [],
     "x": 1140,
     "y": 580,
     "wires": [
       [
         "b6c08c061df00bfb"
       ]
     ]
   },
     "id": "7e0e316e37704392",
     "type": "function",
     "z": "692a8e81702f3975",
     "name": "Main Function3",
     "func": "var onoffstatus = global.get(\"mainstatus\")\nvar sensor3 = msg.sensor3\n\nif
```

```
onoffstatus: onoffstatus,\n
                           sensor3: sensor3,\n \};\n\n // Output the debug message\n
node.send({ payload: debugMsg }); \n\n",
      "outputs": 1,
      "noerr": 0,
      "initialize": "",
      "finalize": "",
      "libs": [],
      "x": 1140,
      "y": 540,
      "wires": [
        [
          "8c44d42feb54c70b"
        ]
     ]
    },
      "id": "b6c08c061df00bfb",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "function 9",
      "func": "var childpathvalue = global.set(\"childpathvariable\",
"outputs": 1,
      "noerr": 0,
      "initialize": "",
      "finalize": "",
      "libs": [],
      "x": 1320,
```

```
"y": 580,
  "wires": [
    [
       "7243fbb04788026e"
    ]
  1
},
  "id": "ba1fd42427e08b5e",
  "type": "debug",
  "z": "692a8e81702f3975",
  "name": "debug 33",
  "active": false,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "payload",
  "targetType": "msg",
  "statusVal": "",
  "statusType": "auto",
  "x": 1880,
  "y": 680,
  "wires": []
},
  "id": "b7694db51e7782a8",
  "type": "firebase modify",
  "z": "692a8e81702f3975",
```

```
"name": "firebase_sensor4",
      "firebaseconfig": "",
      "childpath": "msg.childpath",
      "method": "push",
      "value": "msg.payload",
      "priority": "msg.priority",
      "x": 1910,
      "y": 720,
      "wires": [
         []
      ]
    },
      "id": "09aebf58d8097401",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "sensor4Input",
      "func": "var sensor04 = global.get(\"sensor/4\")\nmsg.sensor<math>04 = sensor_04\n\return
msg;",
      "outputs": 1,
      "noerr": 0,
      "initialize": "",
      "finalize": "",
      "libs": [],
      "x": 1510,
      "y": 680,
      "wires": [
         [
```

```
"2a1e195ef1090b22"
                              ]
                      1
               },
                      "id": "2a1e195ef1090b22",
                      "type": "function",
                      "z": "692a8e81702f3975",
                      "name": "Format Time",
                      "func": "var childpath1 = global.get(\"childpathvariable\");\nvar sensorValue =
msg.sensor04;\n\n// Create a new JavaScript Date object to get the current timestamp\nvar
timestamp = Date.now();\n// Create a new payload object with the sensor value and
timestamp\nvar newPayload = {\nvalue : sensorValue,\nvar newPayload = 
timestamp\n};\nmsg.payload = newPayload;\nmsg.childpath = \"sensor/Sport/\"
+childpath1+\"/sensor4\";\n// Set the new payload object\n// Send the modified message to the
next node (Firebase)\nreturn msg;",
                      "outputs": 1,
                      "noerr": 0,
                      "initialize": "",
                      "finalize": "",
                      "libs": [],
                      "x": 1690,
                      "y": 720,
                      "wires": [
                              [
                                        "ba1fd42427e08b5e",
                                        "b7694db51e7782a8"
                              1
                      ]
```

```
},
   {
     "id": "7f340fa4eaf578e4",
     "type": "firebase.on",
     "z": "692a8e81702f3975",
     "name": "firbaseChildPath",
     "firebaseconfig": "",
     "childpath": "/sensor/startStop/sportId",
     "atStart": true,
     "eventType": "value",
     "queries": [],
     "x": 1140,
     "y": 720,
     "wires": [
       [
         "57806fe59847fcbc"
       ]
     ]
   },
     "id": "44cb6307237beede",
     "type": "function",
     "z": "692a8e81702f3975",
     "name": "Main Function4",
     "func": "var onoffstatus = global.get(\"mainstatus\")\nvar sensor4 = msg.sensor4\n\nif
onoffstatus: onoffstatus,\n
                         sensor4: sensor4,\n \};\n\n // Output the debug message\n
"outputs": 1,
```

```
"noerr": 0,
     "initialize": "",
     "finalize": "",
     "libs": [],
     "x": 1140,
     "y": 680,
     "wires": [
       [
          "09aebf58d8097401"
       ]
     ]
    },
     "id": "57806fe59847fcbc",
     "type": "function",
     "z": "692a8e81702f3975",
     "name": "function 10",
     "func": "var childpathvalue = global.set(\"childpathvariable\",
"outputs": 1,
     "noerr": 0,
     "initialize": "",
     "finalize": "",
     "libs": [],
     "x": 1320,
     "y": 720,
     "wires": [
       [
```

```
"2a1e195ef1090b22"
    ]
  ]
},
  "id": "8a7fe83998fd65ef",
  "type": "debug",
  "z": "692a8e81702f3975",
  "name": "debug 34",
  "active": false,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "payload",
  "targetType": "msg",
  "statusVal": "",
  "statusType": "auto",
  "x": 1880,
  "y": 820,
  "wires": []
},
  "id": "54923a9ccda3f08c",
  "type": "firebase modify",
  "z": "692a8e81702f3975",
  "name": "firebase_sensor5",
  "firebaseconfig": "",
  "childpath": "msg.childpath",
```

```
"method": "push",
      "value": "msg.payload",
       "priority": "msg.priority",
       "x": 1910,
       "y": 860,
       "wires": [
         []
      ]
    },
       "id": "e2475308ede5eba5",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "sensor5Input",
      "func": "var sensor05 = global.get(\"sensor/5\")\nmsg.sensor05 = sensor05\n\nreturn
msg;",
       "outputs": 1,
       "noerr": 0,
      "initialize": "",
      "finalize": "",
      "libs": [],
       "x": 1510,
       "y": 820,
       "wires": [
         [
           "14829472da39f8de"
         ]
       ]
```

```
},
    {
      "id": "14829472da39f8de",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "Format Time",
      "func": "var childpath1 = global.get(\"childpathvariable\");\nvar sensorValue =
msg.sensor05;\n\n// Create a new JavaScript Date object to get the current timestamp\nvar
timestamp = Date.now();\n// Create a new payload object with the sensor value and
timestamp \mid nvar \ newPayload = \{ \mid n \ value : sensorValue, \mid n \ timestamp : 
timestamp\n};\nmsg.payload = newPayload;\nmsg.childpath = \"sensor/Sport/\"
+childpath1+\"/sensor5\";\n// Set the new payload object\n// Send the modified message to the
next node (Firebase)\nreturn msg;",
      "outputs": 1,
      "noerr": 0,
      "initialize": "",
      "finalize": "",
      "libs": [],
      "x": 1690,
      "y": 860,
      "wires": [
         [
           "8a7fe83998fd65ef",
```

"id": "01d010ee86aec405",

"54923a9ccda3f08c"

1

1

},

```
"type": "firebase.on",
     "z": "692a8e81702f3975",
     "name": "firbaseChildPath",
     "firebaseconfig": "",
     "childpath": "/sensor/startStop/sportId",
     "atStart": true,
     "eventType": "value",
     "queries": [],
     "x": 1140,
     "y": 860,
     "wires": [
       [
         "baed65b3c4b399fc"
       ]
     ]
   },
     "id": "839b7ff7ab9e0719",
     "type": "function",
     "z": "692a8e81702f3975",
     "name": "Main Function5",
     "func": "var onoffstatus = global.get(\"mainstatus\")\nvar sensor5 = msg.sensor5\n\nif
onoffstatus: onoffstatus,\n
                         sensor5: sensor5,\n \};\n\n // Output the debug message\n
"outputs": 1,
     "noerr": 0,
     "initialize": "",
     "finalize": "",
```

```
"libs": [],
       "x": 1140,
       "y": 820,
       "wires": [
         [
            "e2475308ede5eba5"
         ]
      ]
    },
       "id": "baed65b3c4b399fc",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "function 11",
      "func": "var childpathvalue = global.set(\"childpathvariable\",
msg.payload)\nmsg.childpath = childpathvalue;\nreturn msg;\n",
       "outputs": 1,
       "noerr": 0,
      "initialize": "",
       "finalize": "",
       "libs": [],
       "x": 1320,
       "y": 860,
       "wires": [
         [
            "14829472da39f8de"
         ]
       ]
```

```
},
{
  "id": "4e8010db6be0e78b",
  "type": "debug",
  "z": "692a8e81702f3975",
  "name": "debug 35",
  "active": false,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "payload",
  "targetType": "msg",
  "statusVal": "",
  "statusType": "auto",
  "x": 1880,
  "y": 960,
  "wires": []
},
  "id": "83c1389c4f91e213",
  "type": "firebase modify",
  "z": "692a8e81702f3975",
  "name": "firebase_sensor6",
  "firebaseconfig": "",
  "childpath": "msg.childpath",
  "method": "push",
  "value": "msg.payload",
  "priority": "msg.priority",
```

```
"x": 1910,
     "y": 1000,
     "wires": [
       []
     ]
   },
     "id": "a8d65efd020731a9",
     "type": "function",
     "z": "692a8e81702f3975",
     "name": "sensor6Input",
     msg;",
     "outputs": 1,
     "noerr": 0,
     "initialize": "",
     "finalize": "",
     "libs": [],
     "x": 1510,
     "y": 960,
     "wires": [
       [
         "995a113b08f9d6ea"
       ]
     ]
   },
     "id": "995a113b08f9d6ea",
```

```
"type": "function",
"z": "692a8e81702f3975",
"name": "Format Time",
```

"func": "var childpath1 = global.get(\"childpathvariable\");\nvar sensorValue = msg.sensor06;\n\n// Create a new JavaScript Date object to get the current timestamp\nvar timestamp = Date.now();\n// Create a new payload object with the sensor value and timestamp\nvar newPayload = $\{\n value : sensorValue,\n timestamp: timestamp\n\};\nmsg.payload = newPayload;\nmsg.childpath= \"sensor/Sport/\" +childpath1+\"/sensor6\";\n// Set the new payload object\n// Send the modified message to the next node (Firebase)\nreturn msg;",$

```
"outputs": 1,
  "noerr": 0,
  "initialize": "",
  "finalize": "",
  "libs": [],
  "x": 1690,
  "y": 1000,
  "wires": [
    [
       "4e8010db6be0e78b",
       "83c1389c4f91e213"
    ]
  ]
},
  "id": "ceb51360e04de15e",
  "type": "firebase.on",
  "z": "692a8e81702f3975",
  "name": "firbaseChildPath",
```

```
"firebaseconfig": "",
    "childpath": "/sensor/startStop/sportId",
    "atStart": true,
    "eventType": "value",
    "queries": [],
    "x": 1140,
    "y": 1000,
    "wires": [
      [
        "e2c19069da477211"
      ]
    ]
   },
    "id": "6d7a9ca191feb608",
    "type": "function",
    "z": "692a8e81702f3975",
    "name": "Main Function6",
    sensor6: sensor6,\n \};\n\n // Output the debug message\n
onoffstatus: onoffstatus,\n
node.send({ payload: debugMsg }); \n\n",
    "outputs": 1,
    "noerr": 0,
    "initialize": "",
    "finalize": "",
    "libs": [],
    "x": 1140,
    "y": 960,
```

```
"wires": [
         [
           "a8d65efd020731a9"
         ]
      ]
    },
      "id": "e2c19069da477211",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "function 12",
      "func": "var childpathvalue = global.set(\"childpathvariable\",
msg.payload)\nmsg.childpath = childpathvalue;\nreturn msg;\n",
      "outputs": 1,
      "noerr": 0,
      "initialize": "",
      "finalize": "",
      "libs": [],
      "x": 1320,
      "y": 1000,
      "wires": [
         [
           "995a113b08f9d6ea"
         ]
      ]
    },
      "id": "7be7afa5bf887579",
```

```
"type": "debug",
  "z": "692a8e81702f3975",
  "name": "debug 36",
  "active": false,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "payload",
  "targetType": "msg",
  "statusVal": "",
  "statusType": "auto",
  "x": 1880,
  "y": 1120,
  "wires": []
},
  "id": "75535e434fabd345",
  "type": "firebase modify",
  "z": "692a8e81702f3975",
  "name": "firebase_sensor7",
  "firebaseconfig": "",
  "childpath": "msg.childpath",
  "method": "push",
  "value": "msg.payload",
  "priority": "msg.priority",
  "x": 1910,
  "y": 1160,
  "wires": [
```

```
[]
      ]
    },
      "id": "9b735333987668a4",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "sensor7Input",
      "func": "var sensor07 = global.get(\"sensor/7\")\nmsg.sensor<math>07 = sensor07\n\return
msg;",
      "outputs": 1,
      "noerr": 0,
      "initialize": "",
      "finalize": "",
      "libs": [],
      "x": 1510,
      "y": 1120,
      "wires": [
         [
           "1f3d24aeb78db6db"
         ]
      1
    },
      "id": "1f3d24aeb78db6db",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "Format Time",
```

"func": "var childpath1 = global.get(\"childpathvariable\");\nvar sensorValue = msg.sensor07;\n\n// Create a new JavaScript Date object to get the current timestamp\nvar timestamp = Date.now();\n// Create a new payload object with the sensor value and timestamp\nvar newPayload = $\{\n value: sensorValue,\n timestamp: timestamp\n\};\nmsg.payload = newPayload;\nmsg.childpath = \"sensor/Sport\\" + childpath1 + \"/sensor7\";\n// Set the new payload object\n// Send the modified message to the next node (Firebase)\nreturn msg;",$

```
"outputs": 1,
  "noerr": 0,
  "initialize": "",
  "finalize": "",
  "libs": [],
  "x": 1690,
  "y": 1160,
  "wires": [
    [
       "7be7afa5bf887579",
       "75535e434fabd345"
    ]
  ]
},
  "id": "a5b509afa5ab801e",
  "type": "firebase.on",
  "z": "692a8e81702f3975",
  "name": "firbaseChildPath",
  "firebaseconfig": "",
  "childpath": "/sensor/startStop/sportId",
  "atStart": true,
```

```
"eventType": "value",
     "queries": [],
     "x": 1140,
     "y": 1160,
     "wires": [
       ſ
         "11dd2e84fc8ec679"
       ]
     ]
   },
   {
     "id": "e6b89d40e15d08db",
     "type": "function",
     "z": "692a8e81702f3975",
     "name": "Main Function7",
     "func": "var onoffstatus = global.get(\"mainstatus\")\nvar sensor7 = msg.sensor7\n\nif
onoffstatus: onoffstatus,\n
                        sensor7: sensor7,\n \};\n\n // Output the debug message\n
"outputs": 1,
     "noerr": 0,
     "initialize": "",
     "finalize": "",
     "libs": [],
     "x": 1140,
     "y": 1120,
     "wires": [
       [
         "9b735333987668a4"
```

```
]
      ]
    },
      "id": "11dd2e84fc8ec679",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "function 13",
      "func": "var childpathvalue = global.set(\"childpathvariable\",
msg.payload)\nmsg.childpath = childpathvalue;\nreturn msg;\n",
      "outputs": 1,
      "noerr": 0,
      "initialize": "",
      "finalize": "",
      "libs": [],
      "x": 1320,
      "y": 1160,
      "wires": [
         [
           "1f3d24aeb78db6db"
         ]
      ]
    },
      "id": "936c9932706065e5",
      "type": "debug",
      "z": "692a8e81702f3975",
      "name": "debug 37",
```

```
"active": false,
  "tosidebar": true,
  "console": false,
  "tostatus": false,
  "complete": "payload",
  "targetType": "msg",
  "statusVal": "",
  "statusType": "auto",
  "x": 1880,
  "y": 1260,
  "wires": []
},
  "id": "5e1cbb34387b870d",
  "type": "firebase modify",
  "z": "692a8e81702f3975",
  "name": "firebase_sensor8",
  "firebaseconfig": "",
  "childpath": "msg.childpath",
  "method": "push",
  "value": "msg.payload",
  "priority": "msg.priority",
  "x": 1910,
  "y": 1300,
  "wires": [
    []
  ]
},
```

```
{
                        "id": "652c50da40834076",
                        "type": "function",
                        "z": "692a8e81702f3975",
                        "name": "sensor4Input",
                        "func": "var sensor08 = global.get(\"sensor/8\")\nmsg.sensor<math>08 = sensor08\n\return
msg;",
                        "outputs": 1,
                        "noerr": 0,
                        "initialize": "",
                        "finalize": "",
                        "libs": [],
                        "x": 1510,
                        "y": 1260,
                        "wires": [
                                 [
                                           "25696aece9e21ea6"
                                ]
                        ]
                },
                        "id": "25696aece9e21ea6",
                        "type": "function",
                        "z": "692a8e81702f3975",
                        "name": "Format Time",
                        "func": "var childpath1 = global.get(\"childpathvariable\");\nvar sensorValue =
msg.sensor08;\n\n// Create a new JavaScript Date object to get the current timestamp\nvar
timestamp = Date.now();\n// Create a new payload object with the sensor value and
timestamp\nvar newPayload = {\nvalue : sensorValue,\nvar newPayload =
```

 $timestamp\n\};\nmsg.payload = newPayload;\nmsg.childpath = \"sensor/Sport/\" \\ + childpath 1 + \"/sensor8\";\n//\ Set the new payload object\n//\ Send the modified message to the next node (Firebase)\nreturn msg;",$

```
"outputs": 1,
  "noerr": 0,
  "initialize": "",
  "finalize": "",
  "libs": [],
  "x": 1690,
  "y": 1300,
  "wires": [
    [
       "936c9932706065e5",
       "5e1cbb34387b870d"
    ]
  ]
},
  "id": "842b7974e6e58e17",
  "type": "firebase.on",
  "z": "692a8e81702f3975",
  "name": "firbaseChildPath",
  "firebaseconfig": "",
  "childpath": "/sensor/startStop/sportId",
  "atStart": true,
  "eventType": "value",
  "queries": [],
  "x": 1140,
```

```
"y": 1300,
     "wires": [
       [
         "bb9b071122f74c48"
      ]
     1
   },
     "id": "5f1c885c749ffce9",
     "type": "function",
     "z": "692a8e81702f3975",
     "name": "Main Function8",
     "func": "var onoffstatus = global.get(\"mainstatus\")\nvar sensor8 = msg.sensor8\n\nif
onoffstatus: onoffstatus,\n
                        sensor8: sensor8,\n \};\n\n // Output the debug message\n
"outputs": 1,
     "noerr": 0,
     "initialize": "",
     "finalize": "",
     "libs": [],
     "x": 1140,
     "y": 1260,
     "wires": [
      [
         "652c50da40834076"
      ]
     ]
   },
```

```
{
      "id": "bb9b071122f74c48",
      "type": "function",
      "z": "692a8e81702f3975",
      "name": "function 14",
      "func": "var childpathvalue = global.set(\"childpathvariable\",
msg.payload)\nmsg.childpath = childpathvalue;\nreturn msg;\n",
      "outputs": 1,
      "noerr": 0,
      "initialize": "",
      "finalize": "",
      "libs": [],
      "x": 1320,
      "y": 1300,
      "wires": [
         [
           "25696aece9e21ea6"
         ]
      ]
    },
      "id": "78196a4af312f9cc",
      "type": "debug",
      "z": "692a8e81702f3975",
      "name": "debug 38",
      "active": false,
      "tosidebar": true,
      "console": false,
```

```
"tostatus": false,
  "complete": "payload",
  "targetType": "msg",
  "statusVal": "",
  "statusType": "auto",
  "x": 1880,
  "y": 1400,
  "wires": []
},
  "id": "a9db39277cb3e373",
  "type": "firebase modify",
  "z": "692a8e81702f3975",
  "name": "firebase_sensor9",
  "firebaseconfig": "",
  "childpath": "msg.childpath",
  "method": "push",
  "value": "msg.payload",
  "priority": "msg.priority",
  "x": 1910,
  "y": 1440,
  "wires": [
    []
  ]
},
  "id": "0f1be2d9461b7441",
  "type": "function",
```

```
"z": "692a8e81702f3975",
                    "name": "sensor9Input",
                    "func": "var sensor09 = global.get(\"sensor/9\")\nmsg.sensor<math>09 = sensor09\n\return
msg;",
                    "outputs": 1,
                    "noerr": 0,
                    "initialize": "",
                    "finalize": "",
                    "libs": [],
                    "x": 1510,
                    "y": 1400,
                    "wires": [
                            [
                                    "d482284a1c21c288"
                           1
                    1
             },
             {
                    "id": "d482284a1c21c288",
                    "type": "function",
                    "z": "692a8e81702f3975",
                    "name": "Format Time",
                    "func": "var childpath1 = global.get(\"childpathvariable\");\nvar sensorValue =
msg.sensor09;\n\n// Create a new JavaScript Date object to get the current timestamp\nvar
timestamp = Date.now();\n// Create a new payload object with the sensor value and
timestamp\nvar newPayload = {\nvalue : sensorValue,\nvar newPayload = 
timestamp\n};\nmsg.payload = newPayload;\nmsg.childpath = \"sensor/Sport/\"
+childpath1+\"/sensor9\";\n// Set the new payload object\n// Send the modified message to the
next node (Firebase)\nreturn msg;",
                    "outputs": 1,
```

```
"noerr": 0,
  "initialize": "",
  "finalize": "",
  "libs": [],
  "x": 1690,
  "y": 1440,
  "wires": [
    [
       "78196a4af312f9cc",
       "a9db39277cb3e373"
    ]
  ]
},
  "id": "5f182796359d27d3",
  "type": "firebase.on",
  "z": "692a8e81702f3975",
  "name": "firbaseChildPath",
  "firebaseconfig": "",
  "childpath": "/sensor/startStop/sportId",
  "atStart": true,
  "eventType": "value",
  "queries": [],
  "x": 1140,
  "y": 1440,
  "wires": [
    [
       "e639426370c2657a"
```

```
]
     ]
   },
     "id": "7b6fb690a73975b3",
     "type": "function",
     "z": "692a8e81702f3975",
     "name": "Main Function9",
     "func": "var onoffstatus = global.get(\"mainstatus\")\nvar sensor9 = msg.sensor9\n\nif
onoffstatus: onoffstatus,\n
                        sensor9: sensor9,\n \};\n\n // Output the debug message\n
"outputs": 1,
     "noerr": 0,
     "initialize": "",
     "finalize": "",
     "libs": [],
     "x": 1140,
     "y": 1400,
     "wires": [
      [
         "0f1be2d9461b7441"
      ]
     ]
   },
     "id": "e639426370c2657a",
     "type": "function",
     "z": "692a8e81702f3975",
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"name": "function 15",
      "func": "var childpathvalue = global.set(\"childpathvariable\",
msg.payload)\nmsg.childpath = childpathvalue;\nreturn msg;\n",
      "outputs": 1,
      "noerr": 0,
      "initialize": "",
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      "x": 1320,
      "y": 1440,
      "wires": [
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           "d482284a1c21c288"
         ]
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    },
      "id": "98c79337c7b7ce98",
      "type": "mqtt-broker",
      "name": "",
      "broker": "broker.hivemq.com",
      "port": "1883",
      "clientid": "",
      "autoConnect": true,
      "usetls": false,
      "protocolVersion": "4",
      "keepalive": "60",
      "cleansession": true,
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     "birthPayload": "",
     "birthMsg": {},
     "closeTopic": "",
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     "closePayload": "",
     "closeMsg": {},
     "willTopic": "",
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     "willPayload": "",
     "willMsg": {},
     "userProps": "",
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]
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