|  |
| --- |
| **การสร้าง MQTT Server บน Raspberry Pi เพื่อใช้งาน Chatbot LINE ในฟาร์มอัจฉริยะ**  **Chatbot LINE from Raspberry Pi MQTT Server for Smart Farming** |
| **ขื่อ-สกุล : B6304577 นายภานุพงศ์ แคนอินทร์** |

|  |
| --- |
| **6/6 –คำถามท้ายบทเพื่อทดสอบความเข้าใจ** |

**Quiz\_201 – Node-RED UI**

* แสดงข้อมูลที่ได้ทำการทดสอบ

|  |
| --- |
| Code nodejs  [  {  "id": "d6af899f9daf2c4b",  "type": "tab",  "label": "Q201-0101",  "disabled": false,  "info": "",  "env": []  },  {  "id": "b2848cd6.ca5c7",  "type": "ui\_slider",  "z": "d6af899f9daf2c4b",  "tab": "5969fd52.22b424",  "name": "Slider",  "topic": "",  "group": "Control LED",  "order": "2",  "min": "0",  "max": "100",  "x": 270,  "y": 160,  "wires": [  [  "1cca457a.60fb5b",  "732721f2.32913",  "3c7de1d6.58b99e",  "869c189f.bbbd18"  ]  ]  },  {  "id": "1cca457a.60fb5b",  "type": "ui\_gauge",  "z": "d6af899f9daf2c4b",  "tab": "5969fd52.22b424",  "name": "Gauge",  "group": "Control LED",  "order": "3",  "format": "{{value}}",  "min": 0,  "max": "1",  "x": 670,  "y": 160,  "wires": []  },  {  "id": "732721f2.32913",  "type": "ui\_chart",  "z": "d6af899f9daf2c4b",  "tab": "5969fd52.22b424",  "name": "",  "group": "Control LED",  "order": "4",  "interpolate": "linear",  "nodata": "No Data",  "removeOlder": 1,  "removeOlderUnit": "86400",  "x": 670,  "y": 220,  "wires": [  [],  []  ]  },  {  "id": "3c7de1d6.58b99e",  "type": "rpi-gpio out",  "z": "d6af899f9daf2c4b",  "name": "LED",  "pin": "26",  "set": "",  "level": "0",  "freq": "",  "out": "pwm",  "bcm": true,  "x": 670,  "y": 100,  "wires": []  },  {  "id": "828cc789.3d3b08",  "type": "function",  "z": "d6af899f9daf2c4b",  "name": "Function",  "func": "if(msg.payload == \"true\"){\n msg.payload = 1;\n}\nelse{\n msg.payload = 0;\n} \nreturn msg;",  "outputs": "1",  "noerr": 0,  "initialize": "",  "finalize": "",  "libs": [],  "x": 480,  "y": 380,  "wires": [  [  "b2848cd6.ca5c7"  ]  ]  },  {  "id": "58638633.9de238",  "type": "ui\_switch",  "z": "d6af899f9daf2c4b",  "tab": "5969fd52.22b424",  "name": "Switch",  "topic": "",  "group": "Control LED",  "order": 1,  "onvalue": "true",  "offvalue": "false",  "x": 270,  "y": 380,  "wires": [  [  "828cc789.3d3b08"  ]  ]  },  {  "id": "869c189f.bbbd18",  "type": "function",  "z": "d6af899f9daf2c4b",  "name": "SetSwitch",  "func": "if(msg.payload > 0)\n msg.payload = 1;\nelse \n msg.payload = 0;\n \nreturn msg;\n",  "outputs": 1,  "noerr": 0,  "initialize": "",  "finalize": "",  "libs": [],  "x": 290,  "y": 280,  "wires": [  [  "58638633.9de238"  ]  ]  },  {  "id": "5969fd52.22b424",  "type": "ui\_tab",  "name": "Q201-0101",  "icon": "dashboard",  "order": "1"  }  ] |
| หน้าจอ node flow ที่ได้ทดสอบ |
| รูปการทดสอบ 1 – UI  A screenshot of a computer  Description automatically generated |
| รูปการทดสอบ 2 |

**Quiz\_202 – Node-RED to LINE notify**

* แสดงข้อมูลที่ได้ทำการทดสอบ

|  |
| --- |
| Code nodejs  [  {  "id": "bf05387658e4fc4c",  "type": "tab",  "label": "Q202-0101",  "disabled": false,  "info": "",  "env": []  },  {  "id": "8cb66889.d96b28",  "type": "http request",  "z": "bf05387658e4fc4c",  "name": "",  "method": "POST",  "ret": "txt",  "paytoqs": "ignore",  "url": "https://notify-api.line.me/api/notify",  "tls": "",  "persist": false,  "proxy": "",  "insecureHTTPParser": false,  "authType": "",  "senderr": false,  "headers": [],  "x": 550,  "y": 260,  "wires": [  [  "6d47b0ce.054b2"  ]  ]  },  {  "id": "6d47b0ce.054b2",  "type": "debug",  "z": "bf05387658e4fc4c",  "name": "",  "active": true,  "tosidebar": true,  "console": false,  "tostatus": false,  "complete": "payload",  "targetType": "msg",  "statusVal": "",  "statusType": "auto",  "x": 730,  "y": 260,  "wires": []  },  {  "id": "51ef834a.3d95ec",  "type": "function",  "z": "bf05387658e4fc4c",  "name": "Message",  "func": "msg.token = 'Your Token';\nmsg.message = \"Hello World\";\nmsg.stickerPackageId = 11537;\nmsg.stickerId = 52002734;\n\nmsg.headers = {\n \"content-type\":\"application/x-www-form-urlencoded\",\n \"Authorization\":\"Bearer \" + msg.token\n};\nmsg.payload = {\n \"message\": msg.message,\n \"stickerPackageId\":msg.stickerPackageId,\n \"stickerId\":msg.stickerId\n};\nreturn msg;\n",  "outputs": 1,  "noerr": 0,  "initialize": "",  "finalize": "",  "libs": [],  "x": 380,  "y": 260,  "wires": [  [  "8cb66889.d96b28"  ]  ]  },  {  "id": "75e765f7.d089fc",  "type": "inject",  "z": "bf05387658e4fc4c",  "name": "",  "props": [  {  "p": "payload"  },  {  "p": "topic",  "vt": "str"  }  ],  "repeat": "",  "crontab": "",  "once": false,  "onceDelay": 0.1,  "topic": "",  "payload": "",  "payloadType": "date",  "x": 200,  "y": 260,  "wires": [  [  "51ef834a.3d95ec"  ]  ]  }  ] |
| หน้าจอ node flow ที่ได้ทดสอบ |
| รูปการทดสอบ 1 – LINE  A screenshot of a chat  Description automatically generated |

**Quiz\_203 – Node-RED to Google Sheet**

* แสดงข้อมูลที่ได้ทำการทดสอบ

|  |
| --- |
| Code nodejs  [  {  "id": "bccf86285085930b",  "type": "tab",  "label": "Q203-0101",  "disabled": false,  "info": "",  "env": []  },  {  "id": "7d1e14812a855917",  "type": "http request",  "z": "bccf86285085930b",  "name": "",  "method": "GET",  "ret": "txt",  "paytoqs": "ignore",  "url": "https://docs.google.com/forms/u/1/d/e/1FAIpQLSfZrXI2Jkf2fCOMY31jeSyHmBqLsJPYtGRpINk90Y6CxExlCA/formResponse?entry.252906820=1111&entry.786950774=1111&entry.1482600245=1111&entry.1894859910=1111",  "tls": "",  "persist": false,  "proxy": "",  "insecureHTTPParser": false,  "authType": "",  "senderr": false,  "headers": [],  "x": 550,  "y": 300,  "wires": [  [  "b9895985dc7e1f96"  ]  ]  },  {  "id": "cb0745f72cc70fd3",  "type": "inject",  "z": "bccf86285085930b",  "name": "",  "props": [  {  "p": "payload"  },  {  "p": "topic",  "vt": "str"  }  ],  "repeat": "",  "crontab": "",  "once": false,  "onceDelay": 0.1,  "topic": "",  "payload": "",  "payloadType": "date",  "x": 160,  "y": 300,  "wires": [  [  "09b1e9e81f8ff62a"  ]  ]  },  {  "id": "b9895985dc7e1f96",  "type": "debug",  "z": "bccf86285085930b",  "name": "",  "active": true,  "tosidebar": true,  "console": false,  "tostatus": false,  "complete": "payload",  "targetType": "msg",  "statusVal": "",  "statusType": "auto",  "x": 750,  "y": 300,  "wires": []  },  {  "id": "09b1e9e81f8ff62a",  "type": "function",  "z": "bccf86285085930b",  "name": "function 1",  "func": "var data = {}\ndata.Tempp = parseFloat((Math.random() \* 20) + 20).toFixed(2);\ndata.Humid = parseFloat((Math.random() \* 20) + 40).toFixed(2);\ndata.Light = parseFloat((Math.random() \* 20) + 60).toFixed(2);\ndata.RSSI = parseFloat((Math.random() \* 20) + 80).toFixed(2);\n\nmsg.payload = data\n\nreturn msg;",  "outputs": 1,  "noerr": 0,  "initialize": "",  "finalize": "",  "libs": [],  "x": 360,  "y": 300,  "wires": [  [  "7d1e14812a855917"  ]  ]  }  ] |
| หน้าจอ node flow ที่ได้ทดสอบ  A screen shot of a computer  Description automatically generated with medium confidence |
| รูปการทดสอบ 1 – Google Sheet |