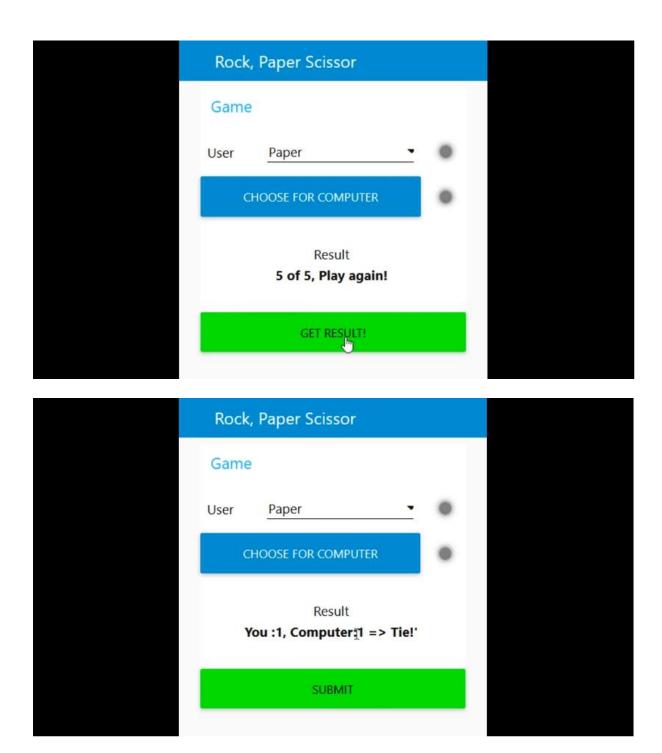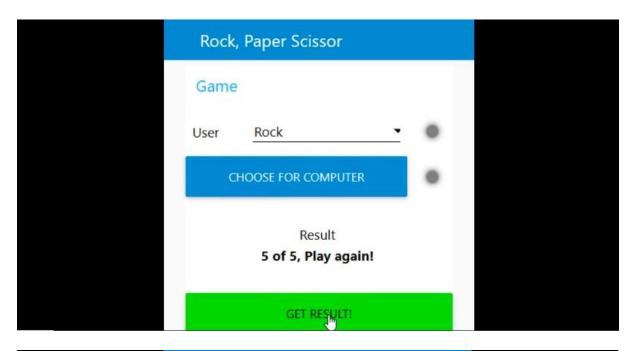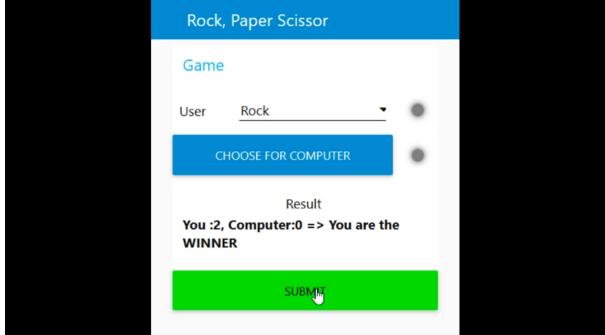# Project 2 - Solution

Feel free to use the solution for the Project 2.

**Code:**

```
[
  {
    "id": "d7648a77e57f1f12",
    "type": "comment",
    "z": "fa7b1894aeffc3c4",
    "name": "Rock paper scissor",
```

```json
        "info": "",
        "x": 110,
        "y": 1460,
        "wires": []
    },
    {
        "id": "7b299a26db1cbc4f",
        "type": "ui_dropdown",
        "z": "fa7b1894aeffc3c4",
        "name": "",
        "label": "User",
        "tooltip": "",
        "place": "Select option",
        "group": "b5f945ab637f5863",
        "order": 1,
        "width": "5",
        "height": "1",
        "passthru": true,
        "multiple": false,
        "options": [
            {
                "label": "Rock",
                "value": "Rock",
                "type": "str"
            },
            {
                "label": "Paper",
                "value": "Paper",
```

```json
                "type": "str"
            },
            {
                "label": "Scissor",
                "value": "Scissor",
                "type": "str"
            }
        ],
        "payload": "",
        "topic": "topic",
        "topicType": "msg",
        "className": "",
        "x": 250,
        "y": 1720,
        "wires": [
            [
                "b4430b68284dbe4a"
            ]
        ]
    },
    {
        "id": "4b53557497496766",
        "type": "ui_button",
        "z": "fa7b1894aeffc3c4",
        "name": "",
        "group": "b5f945ab637f5863",
        "order": 3,
        "width": "5",
```

"height": "1",

"passthru": false,

"label": "Choose for Computer",

"tooltip": "",

"color": "",

"bgcolor": "",

"className": "",

"icon": "",

"payload": "",

"payloadType": "str",

"topic": "topic",

"topicType": "msg",

"x": 300,

"y": 1660,

"wires": [

  [

    "cd40657485b198b0"

  ]

]

},

{

  "id": "cd40657485b198b0",

  "type": "function",

  "z": "fa7b1894aeffc3c4",

  "name": "function 79",

  "func": "msg.payload = Math.floor(Math.random()*3);\nvar x;\nif (msg.payload == 0)\n{\n    msg.payload = 'Rock';\n}\nelse if (msg.payload == 1)\n{\n    msg.payload = 'Paper';\n}\nelse\n{\n    msg.payload = 'Scissor';\n}\nflow.set('computer', msg.payload);\nmsg.payload = true;\nreturn msg;",

```json
        "outputs": 1,

        "timeout": 0,

        "noerr": 0,

        "initialize": "",

        "finalize": "",

        "libs": [],

        "x": 550,

        "y": 1660,

        "wires": [

            [

                "15145b3e2520cc89"

            ]

        ]

    },

    {

        "id": "74c1a41f1bc470c2",

        "type": "ui_text",

        "z": "fa7b1894aeffc3c4",

        "group": "b5f945ab637f5863",

        "order": 5,

        "width": "6",

        "height": "2",

        "name": "",

        "label": "Result",

        "format": "",

        "layout": "col-center",

        "className": "",

        "style": false,
```

```
        "font": "Arial,Arial,Helvetica,sans-serif",

        "fontSize": "14",

        "color": "#000000",

        "x": 950,

        "y": 1500,

        "wires": []

    },

    {

        "id": "df1461c3e5ca32c8",

        "type": "ui_button",

        "z": "fa7b1894aeffc3c4",

        "name": "",

        "group": "b5f945ab637f5863",

        "order": 6,

        "width": 0,

        "height": 0,

        "passthru": false,

        "label": "",

        "tooltip": "",

        "color": "black",

        "bgcolor": "lime",

        "className": "",

        "icon": "",

        "payload": "",

        "payloadType": "str",

        "topic": "topic",

        "topicType": "msg",

        "x": 530,
```

```
        "y": 1580,

        "wires": [

            [

                "c79425032d7540f2"

            ]

        ]

    },

    {

        "id": "b4430b68284dbe4a",

        "type": "function",

        "z": "fa7b1894aeffc3c4",

        "name": "function 80",

        "func": "flow.set('user',msg.payload);\nmsg.payload = true;\nreturn msg;",

        "outputs": 1,

        "timeout": 0,

        "noerr": 0,

        "initialize": "",

        "finalize": "",

        "libs": [],

        "x": 550,

        "y": 1720,

        "wires": [

            [

                "bb1b75ac9021346d"

            ]

        ]

    },

    {
```

"id": "15145b3e2520cc89",

"type": "ui_led",

"z": "fa7b1894aeffc3c4",

"order": 4,

"group": "b5f945ab637f5863",

"width": "1",

"height": "1",

"label": "",

"labelPlacement": "left",

"labelAlignment": "left",

"colorForValue": [

    {

        "color": "#808080",

        "value": "false",

        "valueType": "bool"

    },

    {

        "color": "#00ff00",

        "value": "true",

        "valueType": "bool"

    }

],

"allowColorForValueInMessage": false,

"shape": "circle",

"showGlow": true,

"name": "",

"x": 1130,

"y": 1660,

```json
      "wires": []
    },
    {
      "id": "0ba51547b83b6c49",
      "type": "function",
      "z": "fa7b1894aeffc3c4",
      "name": "function 82",
      "func": "msg.payload = false;\nreturn msg;",
      "outputs": 1,
      "timeout": 0,
      "noerr": 0,
      "initialize": "",
      "finalize": "",
      "libs": [],
      "x": 950,
      "y": 1580,
      "wires": [
        [
          "15145b3e2520cc89",
          "bb1b75ac9021346d"
        ]
      ]
    },
    {
      "id": "c79425032d7540f2",
      "type": "function",
      "z": "fa7b1894aeffc3c4",
      "name": "function 83",
```

"func": "var computer = flow.get('computer')||'';\nvar user = flow.get('user')||'';\nvar computerScore = flow.get('computerScore');\nvar userScore = flow.get('userScore');\nvar count = flow.get('count');\n\nif (count < 5)\n{\nswitch(computer)\n{\n   case 'Rock':\n   if (user === 'Rock')\n   {\n      break;\n   }\n   else if (user === 'Paper')\n   {\n      userScore = userScore + 1;\n      break;\n   }\n   else if (user === 'Scissor') \n   {\n      computerScore = computerScore + 1;\n      break;\n   }\n\n   case 'Paper':\n      if (user === 'Paper') {\n         break;\n      }\n      else if (user === 'Scissor') {\n         userScore = userScore + 1;\n         break;\n      }\n      else if (user === 'Rock') {\n         computerScore = computerScore + 1;\n         break;\n      }\n\n   case 'Scissor':\n      if (user === 'Scissor') {\n         break;\n      }\n      else if (user === 'Rock') {\n         userScore = userScore + 1;\n         break;\n      }\n      else if (user === 'Paper') {\n         computerScore = computerScore + 1;\n         break;\n      }\n}\n   count = count + 1;\n   flow.set('count', count);\n   msg.payload = `5 of ${count}, Play again!`;\n   flow.set('count', count);\n   flow.set('computerScore', computerScore);\n   flow.set('userScore', userScore);\n   return msg;\n}\n\nif (count == 5)\n   {  \n      if (userScore > computerScore)\n      {\n         msg.payload = `You :${userScore}, Computer:${computerScore} => You are the WINNER`;\n      }\n      else if (userScore < computerScore)\n      {\n         msg.payload = `You :${userScore}, Computer:${computerScore} => Computer is the WINNER`;\n      }\n      else\n      {\n msg.payload = `You :${userScore}, Computer:${computerScore} => Tie!`;\n      }\n      count = count + 1;\n      flow.set('count', count);\n      return msg;\n   }\ncount = count + 1;\nflow.set('count', count);\nreturn msg;\n",

    "outputs": 1,

    "timeout": 0,

    "noerr": 0,

    "initialize": "",

    "finalize": "",

    "libs": [],

    "x": 730,

    "y": 1580,

    "wires": [

       [

          "74c1a41f1bc470c2",

          "0ba51547b83b6c49",

          "470cee0b089d1994"

```
        ]
    ]
},
{
    "id": "689a58bcb74f37e5",
    "type": "inject",
    "z": "fa7b1894aeffc3c4",
    "name": "Initialize variables",
    "props": [
        {
            "p": "payload"
        },
        {
            "p": "topic",
            "vt": "str"
        }
    ],
    "repeat": "",
    "crontab": "",
    "once": true,
    "onceDelay": 0.1,
    "topic": "",
    "payload": "",
    "payloadType": "date",
    "x": 130,
    "y": 1500,
    "wires": [
        [
```

```
            "f406095add608db1",

            "470cee0b089d1994"

        ]

      ]

    },

    {

      "id": "f406095add608db1",

      "type": "function",

      "z": "fa7b1894aeffc3c4",

      "name": "function 84",

      "func":
"flow.set('user','');\nflow.set('computer','');\nflow.set('userScore',0);\nflow.set('computerSco
re',0);\nflow.set('count',0);\nmsg.payload = \"Let's play!\";\nreturn msg;",

      "outputs": 1,

      "timeout": 0,

      "noerr": 0,

      "initialize": "",

      "finalize": "",

      "libs": [],

      "x": 730,

      "y": 1500,

      "wires": [

        [

          "74c1a41f1bc470c2"

        ]

      ]

    },

    {

      "id": "bb1b75ac9021346d",
```

"type": "ui_led",

"z": "fa7b1894aeffc3c4",

"order": 2,

"group": "b5f945ab637f5863",

"width": "1",

"height": "1",

"label": "",

"labelPlacement": "left",

"labelAlignment": "left",

"colorForValue": [

    {

        "color": "#808080",

        "value": "false",

        "valueType": "bool"

    },

    {

        "color": "#00ff00",

        "value": "true",

        "valueType": "bool"

    }

],

"allowColorForValueInMessage": false,

"shape": "circle",

"showGlow": true,

"name": "",

"x": 1130,

"y": 1720,

"wires": []

        },
        {
            "id": "470cee0b089d1994",

            "type": "function",

            "z": "fa7b1894aeffc3c4",

            "name": "function 85",

            "func": "var count = flow.get('count')||0;\nif (count < 5)\n{\n    msg.topic = 'Submit';\n    return msg;\n}\nelse if (count == 5)\n{\n    msg.topic = 'Get result!';\n    return msg;\n}\nelse\n{\n    flow.set('user', '');\n    flow.set('computer', '');\n    flow.set('userScore', 0);\n    flow.set('computerScore', 0);\n    flow.set('count', 0);\n    msg.topic = \"Submit\";\n    return msg;\n}",

            "outputs": 1,

            "timeout": 0,

            "noerr": 0,

            "initialize": "",

            "finalize": "",

            "libs": [],

            "x": 330,

            "y": 1580,

            "wires": [
                [
                    "df1461c3e5ca32c8"
                ]
            ]
        },
        {
            "id": "b5f945ab637f5863",

            "type": "ui_group",

            "name": "Game",

```json
      "tab": "59b3431fe2716354",

      "order": 1,

      "disp": true,

      "width": "6",

      "collapse": false,

      "className": ""
    },
    {

      "id": "59b3431fe2716354",

      "type": "ui_tab",

      "name": "Rock, Paper Scissor",

      "icon": "dashboard",

      "order": 6,

      "disabled": false,

      "hidden": false
    }
]
```