

Signs with smart connectivity for Better road safety

Objective :

- >> To replace the static signboards, smart connected sign boards are used.
- >> These smart connected sign boards get the speed limitations from a web app using weather API and update automatically.
- >> Based on the weather changes the speed may increase or decrease.
- >> Based on the traffic and fatal situations the diversion signs are displayed.
- >> Guide(Schools), Warning and Service(Hospitals, Restaurant) signs are also displayed accordingly.
- >> Different modes of operations can be selected with the help of buttons.

Code for Registration and Login Credentials :

(index.html)

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      body
      {
        background-image : url('https://img.freepik.com/premium-vector/lilac-abstract-
background_126980-527.jpg?w=996');
        background-repeat : no-repeat;
        background-attachment : fixed;
        background-size : 100% 100%;
      }
    </style>
    <base target = "_top">
    <script>
      function AddRow()
      {
        var usernamee = document.getElementById("usernamee").value;
        var passwordd = document.getElementById("passwordd").value;
        var email = document.getElementById("email").value;
        var phone = document.getElementById("phone").value;
        if(usernamee==" "||passwordd==" "||email==" "||phone==" ")
        {
          return false;
        }
        else
        {
          google.script.run.AddRecord(usernamee,passwordd,email,phone);

```

```

        document.getElementById("page2_id1").className="page2_id1-off";
        document.getElementById("page3_id1").className="page3_id1";
    }
}
function LoginUser()
{
    var username = document.getElementById("username").value;
    var password = document.getElementById("password").value;
    google.script.run.withSuccessHandler(function(output)
    {
        if(output=='TRUE')
        {
            var url1 = 'https://node-red-vygyh-2022-11-04.au-
syd.mybluemix.net/ui/#!/0?socketid=kVaDwx144Sp25m0ZAAAX';
            var winRef = window.open(url1);
            winRef?google.script.host.close():window.onload=function()
            {
                document.getElementById('url1').href=url1;
            }
        }
        else if(output=='FALSE')
        {
            document.getElementById("errorMessage").innerHTML="Invaliddata";
        }
    }).checkLogin(username,password);
}
function function1()
{
    document.getElementById("page1_id1").className="page1_class1-off";
    document.getElementById("page2_id1").className="page2_id1";
}
function function2()
{
    document.getElementById("page2_id1").className="page2_id1-off";
    document.getElementById("page3_id1").className="page3_id1";
}
function function3()
{
    document.getElementById("page3_id1").className="page3_id1-off";
    document.getElementById("page1_id1").className="page1_id1";
}
</script>
<style>
/*page1*/
.page1_class1-off
{
    display : none;
}
/*page2*/
.page2_class1
{
    display : none;
}
.page2_id1-off
{
    display : none;
}
/*page3*/
.page3_class1
{
    display : none;
}

```

```

.page3_id1-off
{
    display : none;
}
input[type=text] : hover
{
    border-bottom : 2px solidblack;
}
input[type=number] : hover
{
    border-bottom : 2px solidblack;
}
input[type=password] : hover
{
    border-bottom : 2px solidblack;
}
</style>
<meta name="viewport" content="width=device-width,initial-scale=1.0">
</head>
<body><center><h1>Signs with smart connectivity for better road safety</h1>
</center><br><br>
<!--page1-->
<center>
<div class="page1_class1" id="page1_id1" style="background-image:
url('https://media.istockphoto.com/id/1302561463/photo/holographic-iridescent-background-unicorn-
colorful-rainbow-foil-abstract-beautiful-
rainbow.jpg?b=1&s=170667a&w=0&k=20&c=BXHTMLyLQNIqvm2od1KerrL5hPVHbjBf5ehhN5sx1JNE=');border:1px solid
gray;border-radius: 20px;width: 250px;padding-top:10px;padding-bottom: 20px;padding-
left:20px;padding-right: 20px;">
<h1>Login</h1>
<input type="text" id="username" placeholder=" Enter the Username" style="outline:
none;border-top: none;border-right: none;border-left: none;font-align:centre;text-transform:
none;font:monospace;font-size:1.2em ;border-bottom: .2rem solid rgba(222, 214, 223, 0.3);margin:1rem
0;height:2rem;font:monospace;width:90%;"/><br>
<input type="password" id="password" placeholder=" Enter the Password" style="border-top:
none;font-align:centre;border-right: none;border-left: none;margin:1rem 0; height:2rem;font-size:
1.2rem;border-bottom: .2rem solid rgba(222, 214, 223, 0.3);text-transform: none; outline:
none;font:monospace;width:90%;"/>
<br><span id="errorMessage" style="color:red"></span><br>
<input type="submit" class="button" value="Login" onclick="LoginUser()" style="float:
centre;padding-top: 1px;padding-bottom: 1px;padding-left: 10px;padding-right: 10px;font-size:
1.2em;"/><br><br><br><br>
<b>If you don't have an account.,</b>
<input type="button" onClick="function1()" value="Register" style="margin-top:10px;font-
weight:bold;"/>
</div>
<!--page2-->
<div class="page2_class1" id="page2_id1" style="background-image:
url('https://media.istockphoto.com/id/1302561463/photo/holographic-iridescent-background-unicorn-
colorful-rainbow-foil-abstract-beautiful-
rainbow.jpg?b=1&s=170667a&w=0&k=20&c=BXHTMLyLQNIqvm2od1KerrL5hPVHbjBf5ehhN5sx1JNE=');border:1px
solid gray;border-radius: 20px;width: 250px;padding-top:10px;padding-bottom: 20px;padding-
left:20px;padding-right: 20px;">
<h1>Register</h1>
<input type="text" id="usernamee" placeholder=" Enter the Name" style="outline:
none;border-top: none;border-right: none;border-left: none;font-align:centre;text-transform:
none;font:monospace;font-size:1.2em ;border-bottom: .2rem solid rgba(222, 214, 223,
0.3);margin:1rem 0;height:2rem;font:monospace;width:90%;"/><br>
<input type="password" id="passwordd" placeholder=" Enter the Password"
style="outline: none;border-top: none;border-right: none;border-left: none;font-align:centre;text-
transform: none;font:monospace;font-size:1.2em ;border-bottom: .2rem solid rgba(222, 214, 223,
0.3);margin:1rem 0;height:2rem;font:monospace;width:90%;"/><br>

```



```

        <input type="text" id="email" placeholder=" Enter the Email" style="outline:
none;border-top: none;border-right: none;border-left: none;font-align:centre;text-transform:
none;font:monospace;font-size:1.2em ;border-bottom: .2rem solid rgba(222, 214, 223,
0.3);margin:1rem 0;height:2rem;font:monospace;width:90%;"/><br><br><br>
        <input type="submit" value="Create" onClick="function2()" style="float:
centre;padding-top: 1px;padding-bottom: 1px;padding-left: 10px;padding-right: 10px;font-size:
1.2em;"/><br><br>
    </div>

    <!--page3-->
    <div class="page3_class1" id="page3_id1" style="background-image:
url('https://media.istockphoto.com/id/1302561463/photo/holographic-iridescent-background-unicorn-
colorful-rainbow-foil-abstract-beautiful-
rainbow.jpg?b=1&s=170667a&w=0&k=20&c=BXHTMLyLQNIqvm2od1KerrL5hPVHbjBf5ehhN5sx1JNE=');border:1px
solid gray;border-radius: 20px;width: 250px;padding-top:10px;padding-bottom: 20px;padding-
left:20px;padding-right: 20px;">
        <center><h2>Thank you for registered !!<br><br></h2></center>
        <input type="submit" onClick="function3()" value="Login" style="float:
centre;padding-top: 1px;padding-bottom: 1px;padding-left: 10px;padding-right: 10px;font-size:
1.2em;"/><br><br>
    </div>
</center>
</body>
</html>

```

(Code.gs)

```

function doGet(e)
{
    var x = HtmlService.createTemplateFromFile("index.html");
    var y = x.evaluate();
    var z = y.setXFrameOptionsMode(HtmlService.XFrameOptionsMode.ALLOWALL);
    return z;
}

function checkLogin(username, password)
{
    var url =
'https://docs.google.com/spreadsheets/d/1IB2nLiYrCbq71P047pnyj9_zDXDoRsIhBEeY74aQl0o/edit#gid=0';
    var ss = SpreadsheetApp.openByUrl(url);
    var webAppSheet = ss.getSheetByName("DATA");
    var getLastRow = webAppSheet.getLastRow();
    var found_record='';
    for(var i=1;i<=getLastRow;i++)
    {
        if(webAppSheet.getRange(i,1).getValue().toUpperCase() ==
            username.toUpperCase() &&
            webAppSheet.getRange(i,2).getValue().toUpperCase()==password.toUpperCase())
        {
            found_record='TRUE';
        }
    }
    if(found_record=='')
    {
        found_record='FALSE';
    }
    return found_record;
}

function AddRecord(usernamee,passwordd,email,phone)
{
    var url =
'https://docs.google.com/spreadsheets/d/1IB2nLiYrCbq71P047pnyj9_zDXDoRsIhBEeY74aQl0o/edit#gid=0';
    var ss = SpreadsheetApp.openByUrl(url);

```

```
var webAppSheet = ss.getSheetByName("DATA");  
webAppSheet.appendRow([usernamee,passwordd,email,phone]);  
}
```

Registration and Login Form :

The screenshot shows a web browser window with the address bar displaying 'File | C:/Users/kilar/Desktop/st%204.html'. The page has a light blue and pink background with a cloud-like pattern. At the top, the text 'Signs with smart connectivity for better road safety' is displayed. Below this, there is a white box containing a login form. The form has the title 'Login' in bold. It includes two input fields: 'Enter the Username' and 'Enter the Password'. Below these fields is a 'Login' button. At the bottom of the box, there is a link that says 'If you don't have an account.,' followed by a 'Register' button. The Windows taskbar is visible at the bottom, showing the search bar, task view button, and several application icons. The system tray on the right shows the temperature as 29°C, the time as 02:51 PM, and the date as 10-11-2022.

Signs with smart connectivity for better road safety

Login

Enter the Username

Enter the Password

Login

If you don't have an account.,

Register

The screenshot shows the same web browser window as above, but with the register form displayed. The form has the title 'Register' in bold. It includes three input fields: 'Enter the Name', 'Enter the Password', and 'Enter the Email'. Below these fields is a 'Create' button. The background and browser interface are identical to the previous screenshot.

Signs with smart connectivity for better road safety

Register

Enter the Name

Enter the Password

Enter the Email

Create

