

```
<html>

<head>
  <!-- <link rel='shortcut icon' type='image/x-icon' href='/favicon.ico' /> -->
  <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css" integrity="sha384-
MCw98/SFnGE8fJT3GXwEOngsV7Zt27NXFoaoApmYm81iuXoPkFOJwJ8ERdknLPM0"
  crossorigin="anonymous">

  <title>Find nearby charging Station</title>
  <style>
    body {
      background-color: #000109;

      background-repeat: no-repeat;
      background-attachment: fixed;
      background-size: 100% 100%;
      backdrop-filter: blur(5px);
      text-align: center;
      color: rgb(255, 255, 255);
      font-family: Arial, Helvetica, sans-serif;
    }

    p{
      display: inline-block;
      text-align: center;
      color: white;
    }
  </style>
  <script src="https://code.jquery.com/jquery-3.3.1.min.js" integrity="sha256-
FgpCb/KJQlLnF0u91ta32o/NMZxltwRo8QtmkMRdAu8="
  crossorigin="anonymous"></script>

</head>

<body>

  <script charset="utf-8" src="https://cdn.ethers.io/scripts/ethers-v4.min.js"
type="text/javascript">
  </script>

  <div class="container">
    <div class="form-group">
      <br>
      <h1>Find Nearby Charging Station</h1>
      <br>
      <br>

      <div class="row">
        <div class="col offset-md-4 col-md-4">
          <label for="latitude"><b>Current Position (Latitude)</b></label>
          <input type="text" class="form-control" id="lat">
          <br>
          <label for="longitude"><b>Current Position (Longitude)</b></label>
          <input type="text" class="form-control" id="lng">
          <br>
          <label for="mileage"><b>Mileage</b></label>
        </div>
      </div>
    </div>
  </body>
</html>
```

[illegible]

[illegible][illegible]

</div>

```
<script>
```

```
var EVContractAddress = "0xa634EEDB8B6f688940F18351d28d99463bb1Fd41";
```

```
let EVContractABI = [
```

```
{
  "constant": false,
  "inputs": [],
  "name": "add",
  "outputs": [],
  "payable": false,
  "stateMutability": "nonpayable",
  "type": "function"
}
```

```
},  
{  
  "constant": true,  
  "inputs": [  
    {  
      "internalType": "uint256",  
      "name": "",  
      "type": "uint256"
```

```

    },
    {
      "internalType": "int16",
      "name": "y",
      "type": "int16"
    },
    {
      "internalType": "int16",
      "name": "price",
      "type": "int16"
    },
    {
      "internalType": "int16",
      "name": "visits",
      "type": "int16"
    },
    {
      "internalType": "int16",
      "name": "chrg_rem",
      "type": "int16"
    },
    {
      "internalType": "int16",
      "name": "rating",
      "type": "int16"
    }
  ],
  "payable": false,
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  "type": "function"
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{
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  "inputs": [],
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  "outputs": [],
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  "stateMutability": "nonpayable",
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  ],
  "name": "calculated",
  "outputs": [
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      "name": "id",
      "type": "int16"
    }
  ],
  {

```

```
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    "name": "x",
    "type": "int16"
  },
  {
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    "name": "y",
    "type": "int16"
  },
  {
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    "name": "price",
    "type": "int16"
  },
  {
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    "name": "visits",
    "type": "int16"
  },
  {
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    "name": "distance",
    "type": "int16"
  },
  {
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    "name": "chrg_rem",
    "type": "int16"
  },
  {
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    "name": "rating",
    "type": "int16"
  },
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  }
],
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"stateMutability": "view",
"type": "function"
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      "name": "x",
      "type": "int16"
    },
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      "internalType": "int16",
      "name": "y",
      "type": "int16"
    }
  ],
```

```
{
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  "name": "battery_perc",
  "type": "int16"
},
{
  "internalType": "int16",
  "name": "mileage",
  "type": "int16"
},
{
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},
{
  "internalType": "int16",
  "name": "pref",
  "type": "int16"
}
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"type": "function"
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      "name": "",
      "type": "uint256"
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  "name": "opt_possible",
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      "type": "int16"
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    {
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      "name": "x",
      "type": "int16"
    },
    {
      "internalType": "int16",
      "name": "y",
      "type": "int16"
    },
    {
      "internalType": "int256",
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      "type": "int256"
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  ]
}
```

```

    },
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    {
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      "name": "rating",
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    },
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      "name": "direction",
      "type": "int16"
    },
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      "name": "score",
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  "type": "function"
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      "type": "int16"
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{
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  "inputs": [],
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  "outputs": [
    {

```



```

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        "type": "uint256"
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"type": "function"
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{
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    "inputs": [],
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    "outputs": [],
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    "stateMutability": "nonpayable",
    "type": "function"
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            "name": "",
            "type": "uint256"
        }
    ],
    "name": "unopt_possible",
    "outputs": [
        {

```

```
    "internalType": "int16",
    "name": "id",
    "type": "int16"
  },
  {
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    "type": "int16"
  },
  {
    "internalType": "int16",
    "name": "y",
    "type": "int16"
  },
  {
    "internalType": "int16",
    "name": "price",
    "type": "int16"
  },
  {
    "internalType": "int16",
    "name": "visits",
    "type": "int16"
  },
  {
    "internalType": "int16",
    "name": "distance",
    "type": "int16"
  },
  {
    "internalType": "int16",
    "name": "chrg_rem",
    "type": "int16"
  },
  {
    "internalType": "int16",
    "name": "rating",
    "type": "int16"
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    "name": "direction",
    "type": "int16"
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"type": "function"
},
{
  "constant": true,
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  "name": "veh",
  "outputs": [
    {
      "internalType": "int16",
      "name": "x",
```

```

        "type": "int16"
    },
    {
        "internalType": "int16",
        "name": "y",
        "type": "int16"
    },
    {
        "internalType": "int16",
        "name": "battery_perc",
        "type": "int16"
    },
    {
        "internalType": "int16",
        "name": "mileage",
        "type": "int16"
    },
    {
        "internalType": "int16",
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        "type": "int16"
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"type": "function"
},
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    "inputs": [],
    "name": "vrange",
    "outputs": [
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            "name": "",
            "type": "int16"
        }
    ],
    "payable": false,
    "stateMutability": "view",
    "type": "function"
}
]

provider.listAccounts().then(function (accounts) {
    signer = provider.getSigner(accounts[0]);
    EVContract = new ethers.Contract(EVContractAddress, EVContractABI, signer);
})

async function find() {

    latitude = $("#lat").val()
    longitude = $("#lng").val()
    mileage = $("#mil").val()
    battery = $("#bp").val()
    direction = $("#prefd").val()
    preference = $("#pref").val()
    if(direction=="north")

```

```
direction = 6;
else if(direction=="south")
direction = 35;
else if(direction=="east")
direction = 14;
else
direction = 15;

if(preference=="cost")
preference = 0;
else preference = 1;

EVContract.init(latitude, longitude, battery, mileage, direction, preference);
await EVContract.sort();
```

```
const result = []
const el = document.getElementById('result');
const el1 = document.getElementById('result1');
const el2 = document.getElementById('result2');
const el3 = document.getElementById('result3');
const el4 = document.getElementById('result4');
const el5 = document.getElementById('result5');
const el6 = document.getElementById('result6');
const el7 = document.getElementById('result7');
const el8 = document.getElementById('result8');
const el9 = document.getElementById('result9');
const el10 = document.getElementById('result10');
const el11 = document.getElementById('result11');
const el12 = document.getElementById('result12');
const el13 = document.getElementById('result13');
const el14 = document.getElementById('result14');
const el15 = document.getElementById('result15');
const el16= document.getElementById('result16');
const el17= document.getElementById('result17');
const el18 = document.getElementById('result18');
const el19 = document.getElementById('result19');
const el20 = document.getElementById('result20');
const el21 = document.getElementById('result21');
const el22 = document.getElementById('result22');
const el23 = document.getElementById('result23');
const el24 = document.getElementById('result24');
const el25 = document.getElementById('result25');
const el26 = document.getElementById('result26');
const el27 = document.getElementById('result27');
const el28 = document.getElementById('result28');
const el29 = document.getElementById('result29');
const el30 = document.getElementById('result30');
const el31 = document.getElementById('result31');
const el32 = document.getElementById('result32');
const el33 = document.getElementById('result33');
const el34 = document.getElementById('result34');
const el35 = document.getElementById('title');
const el36 = document.getElementById('title1');
const el37 = document.getElementById('title2');
const el38 = document.getElementById('title3');
const el39 = document.getElementById('title4');
const el40 = document.getElementById('title5');
```

```

const el41 = document.getElementById('title6');

for(let i=0;i<5;i++) {
  const temp = await EVContract.unopt_possible(i);
  result.push(temp);
}

el.innerHTML = `${result[0].id}`
el1.innerHTML = `${result[0].x}`
el2.innerHTML = `${result[0].y}`
el3.innerHTML = `${result[0].price}`
el4.innerHTML = `${result[0].distance}`
el5.innerHTML = `${result[0].chrg_rem}`
el6.innerHTML = `${result[0].rating}`
el7.innerHTML = `${result[1].id}`
el8.innerHTML = `${result[1].x}`
el9.innerHTML = `${result[1].y}`
el10.innerHTML = `${result[1].price}`
el11.innerHTML = `${result[1].distance}`
el12.innerHTML = `${result[1].chrg_rem}`
el13.innerHTML = `${result[1].rating}`
el14.innerHTML = `${result[2].id}`
el15.innerHTML = `${result[2].x}`
el16.innerHTML = `${result[2].y}`
el17.innerHTML = `${result[2].price}`
el18.innerHTML = `${result[2].distance}`
el19.innerHTML = `${result[2].chrg_rem}`
el20.innerHTML = `${result[2].rating}`
el21.innerHTML = `${result[3].id}`
el22.innerHTML = `${result[3].x}`
el23.innerHTML = `${result[3].y}`
el24.innerHTML = `${result[3].price}`
el25.innerHTML = `${result[3].distance}`
el26.innerHTML = `${result[3].chrg_rem}`
el27.innerHTML = `${result[3].rating}`
el28.innerHTML = `${result[4].id}`
el29.innerHTML = `${result[4].x}`
el30.innerHTML = `${result[4].y}`
el31.innerHTML = `${result[4].price}`
el32.innerHTML = `${result[4].distance}`
el33.innerHTML = `${result[4].chrg_rem}`
el34.innerHTML = `${result[4].rating}`
el35.innerHTML = `${"ID"}`
el36.innerHTML = `${"LAT."}`
el37.innerHTML = `${"LONG."}`
el38.innerHTML = `${"COST"}`
el39.innerHTML = `${"DISTANCE"}`
el40.innerHTML = `${"CHARGE LEFT"}`
el41.innerHTML = `${"RATING"}`

count = await EVContract.ret();
var n = await count;
const arr1 = [];
for(let i=0;i<n;i++) {
  const temp = await EVContract.opt_possible(i);

```

```
arr1.push(temp);
alert(`
ID: ${arr1[i].id}
LATITUDE: ${arr1[i].x}
LONGITUDE: ${arr1[i].y}
COST: ${arr1[i].price}
DISTANCE: ${arr1[i].distance}
CHARGE REMAINING: ${arr1[i].chrg_rem}
RATING: ${arr1[i].rating}
SCORE: ${arr1[i].score}`)
```

```
}
```

```
</script>
```

```
</body>
```

```
</html>
```