

Blockchain Technology Major-1

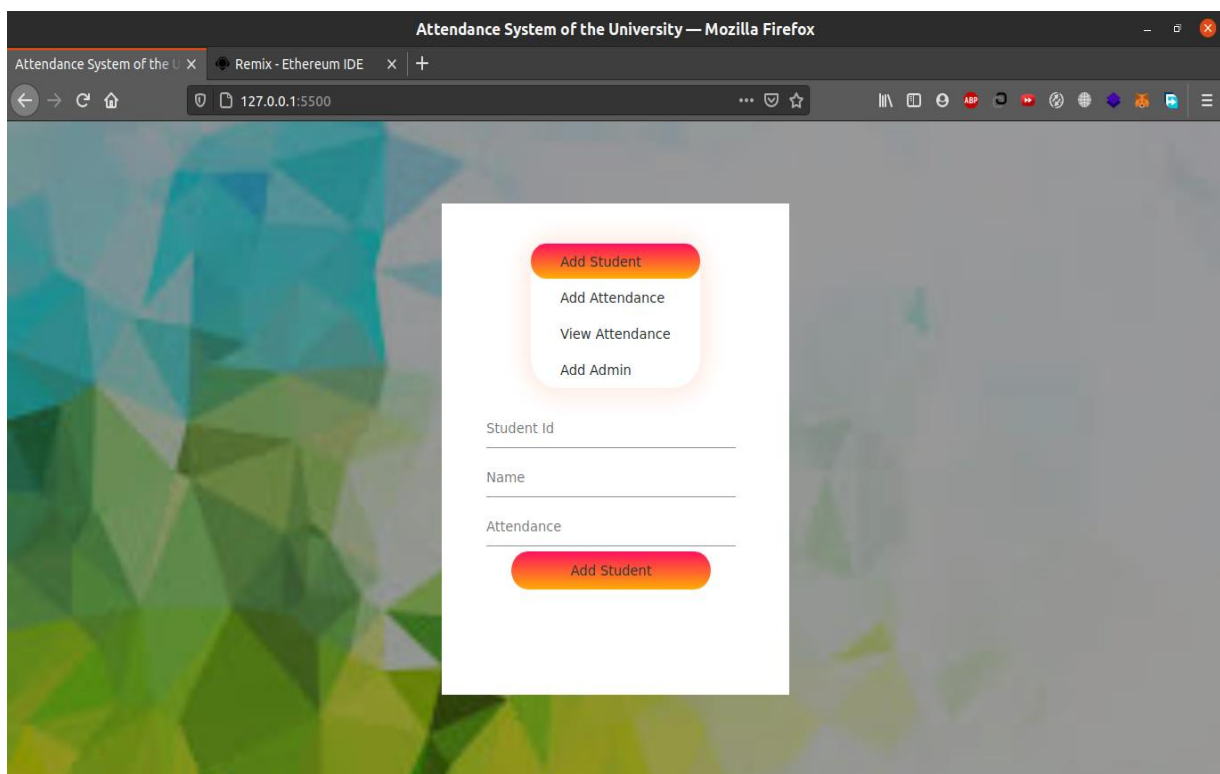
By Ankit Kumar (18mcmc23)

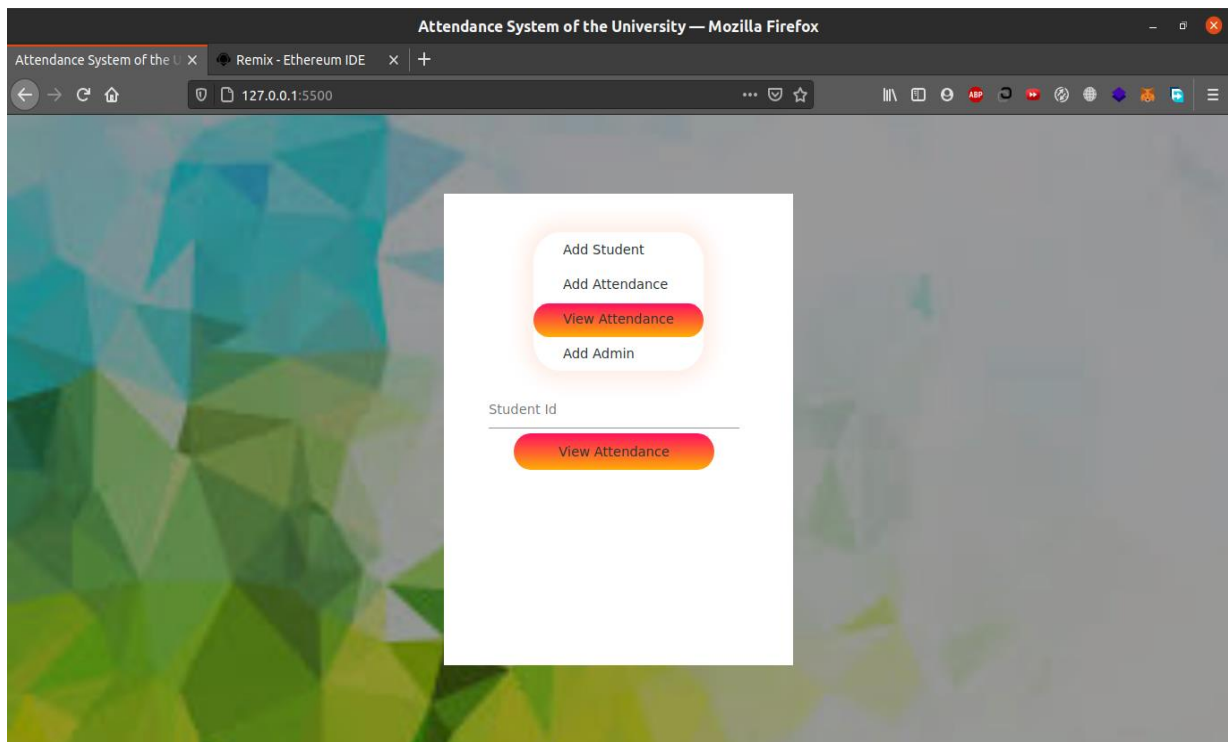
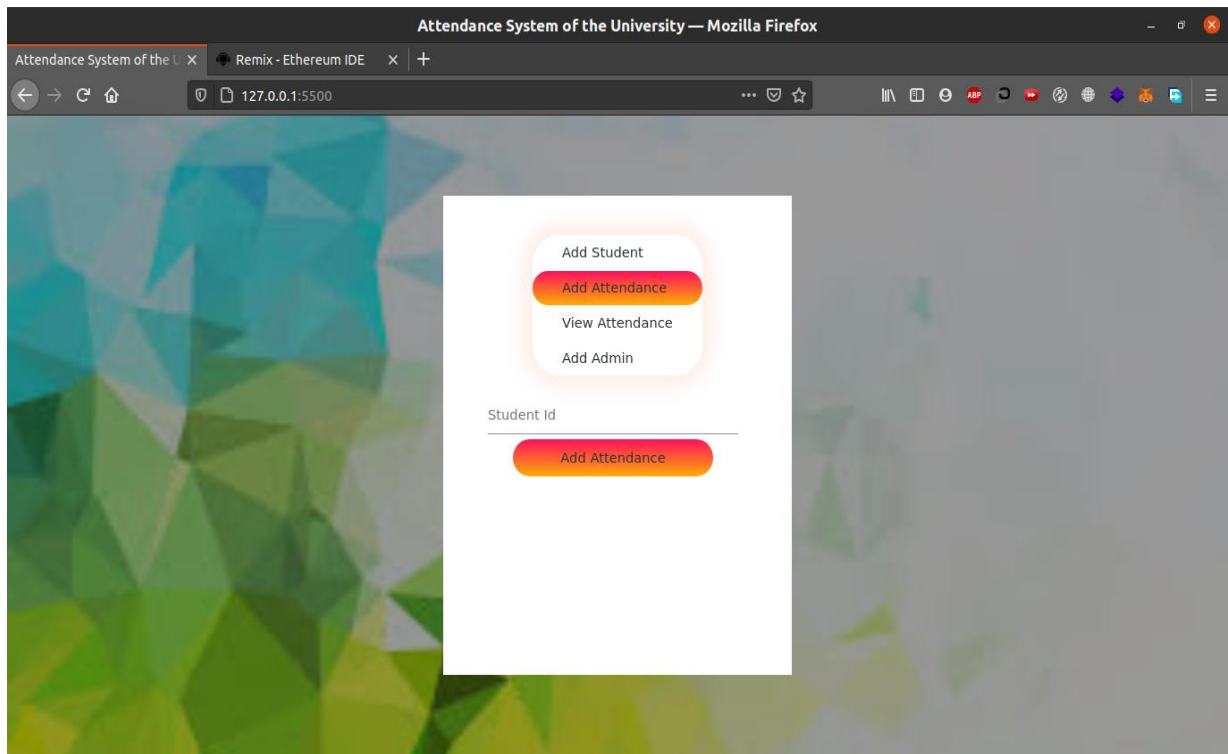
Ques: 1: - Create an attendance management system (with GUI).

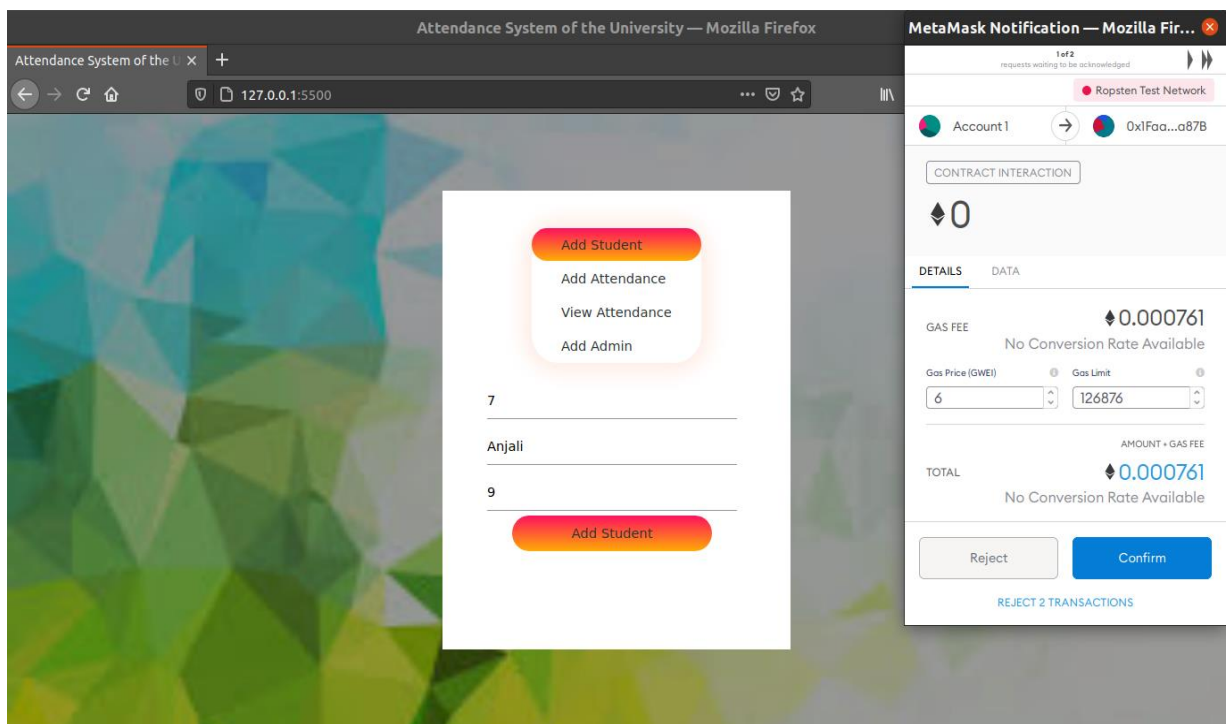
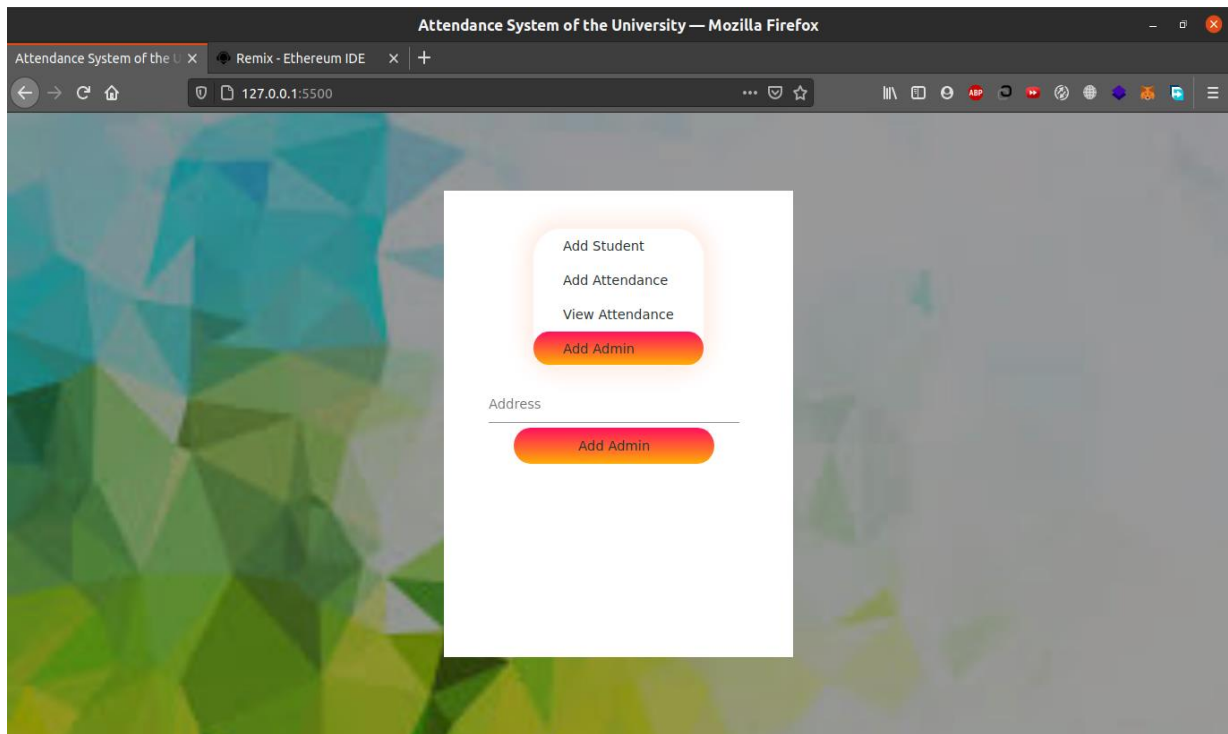
Attendance System of the University using Ethereum Blockchain

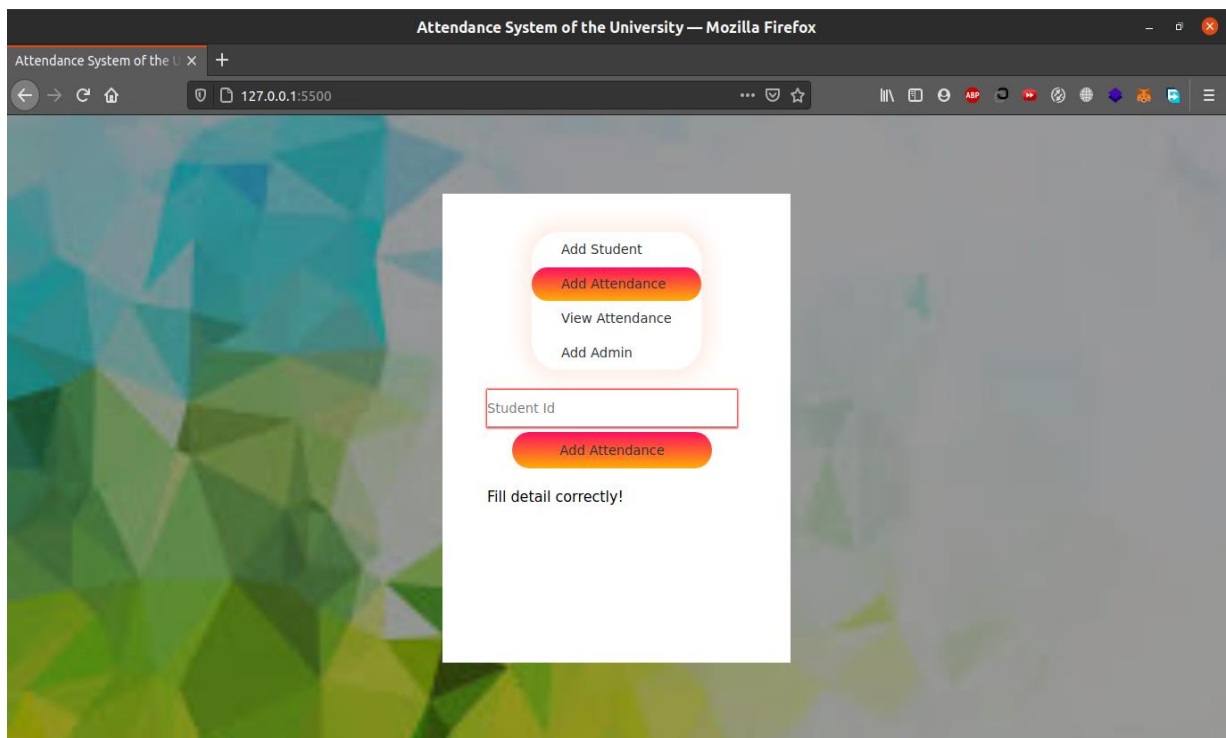
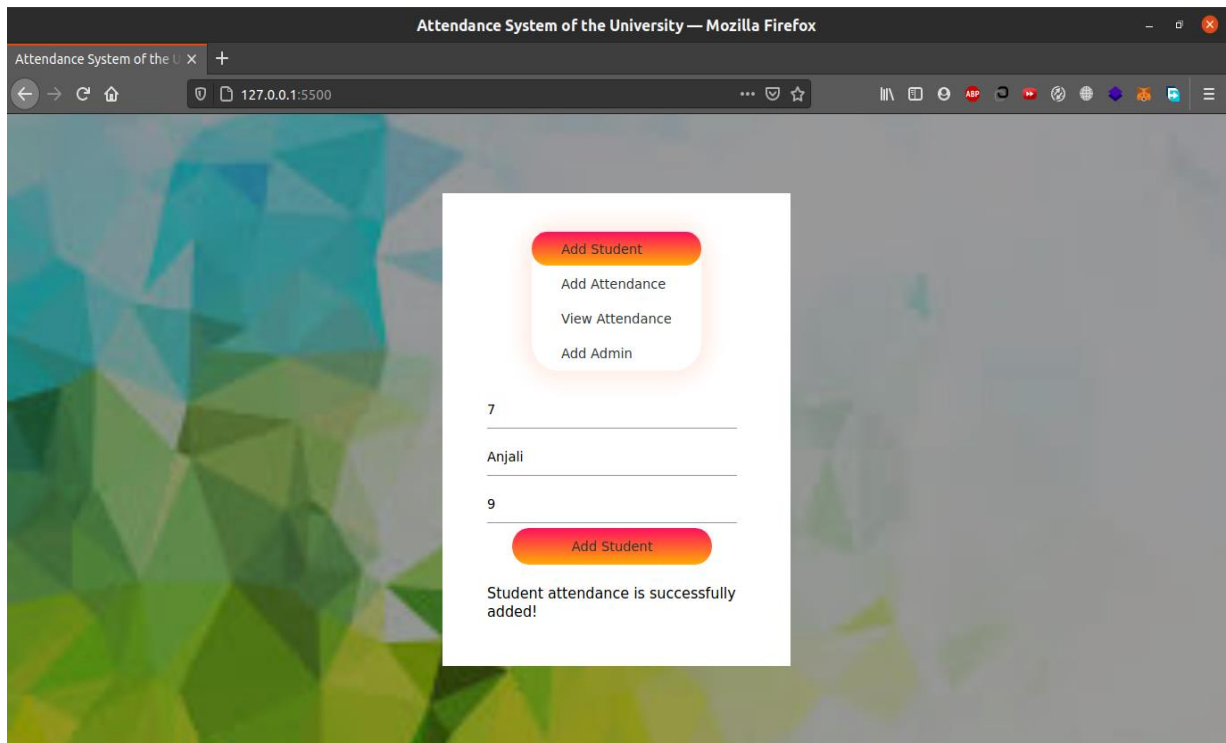
Here is the Link of full code:

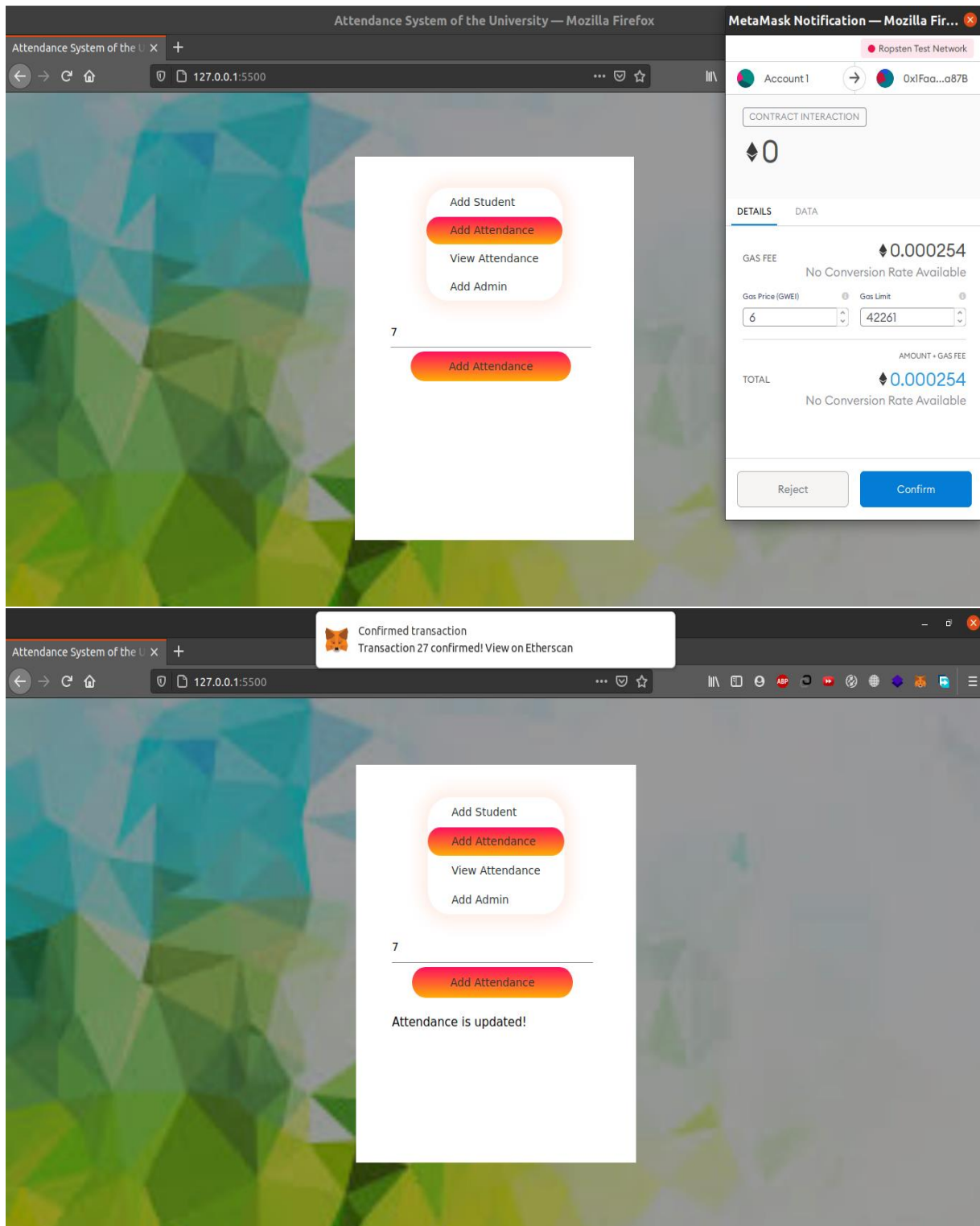
<https://github.com/Ankit687/Attendance-System-Application-Using-Blockchain>

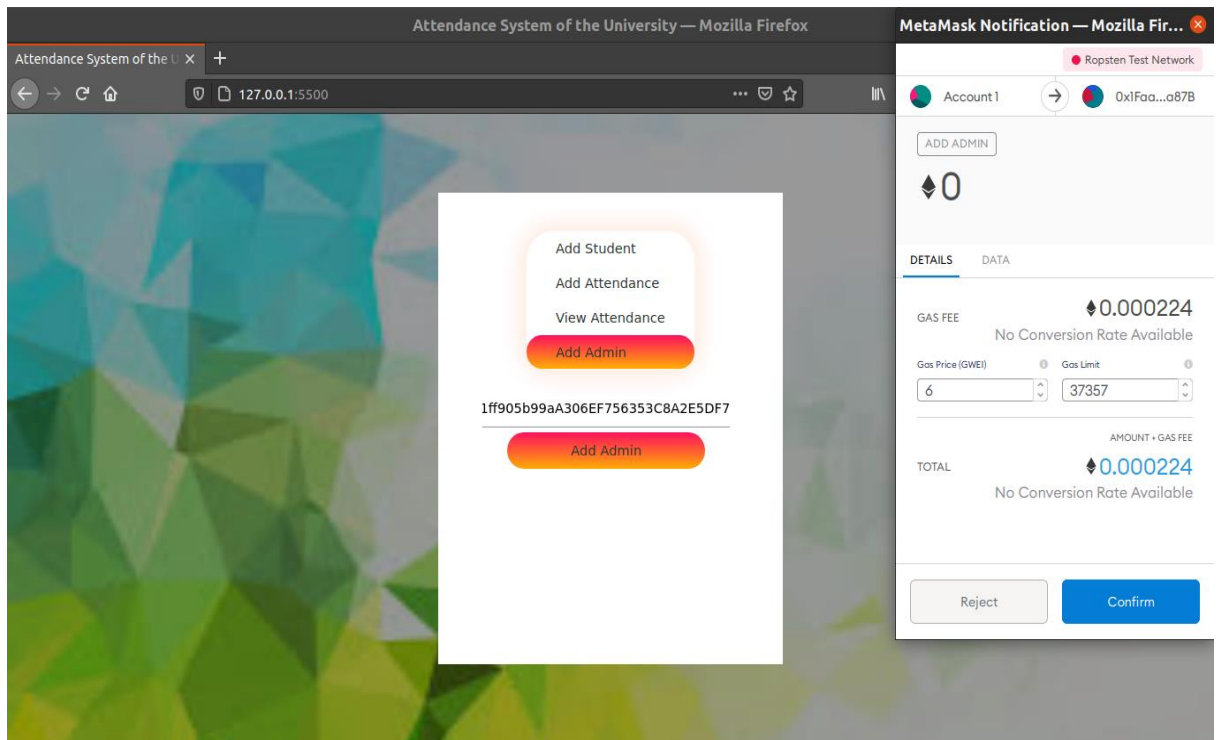
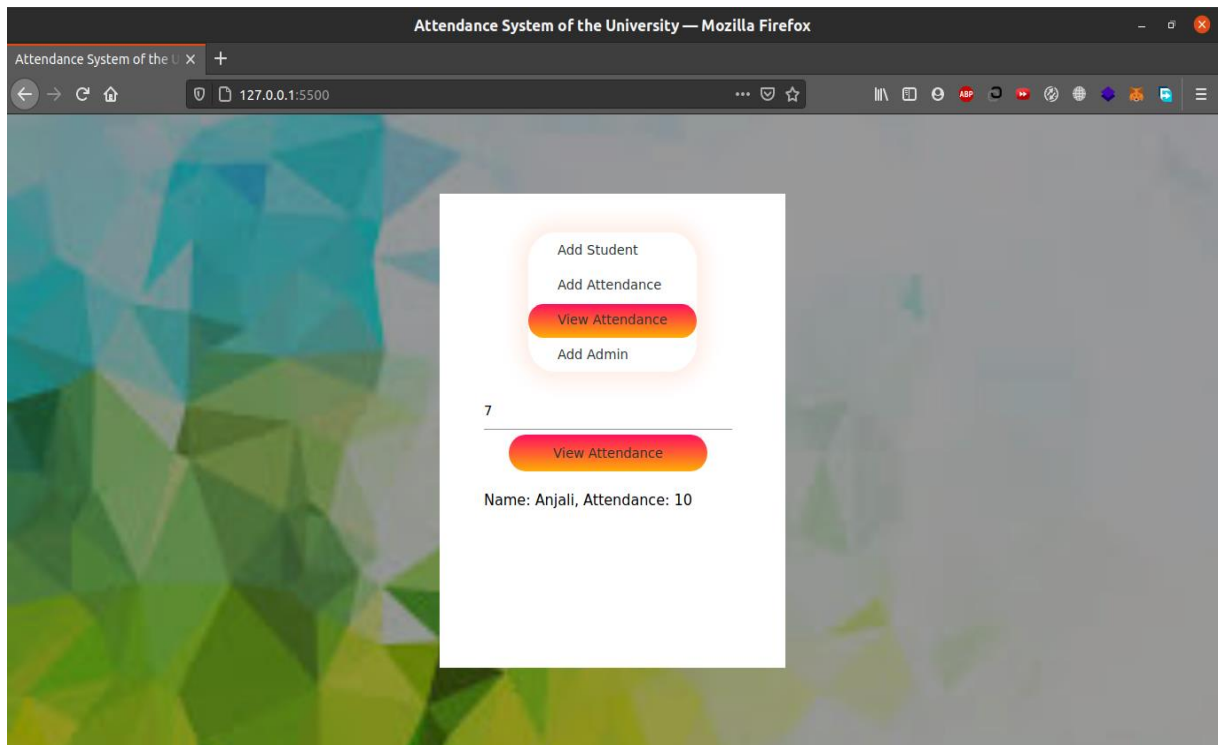


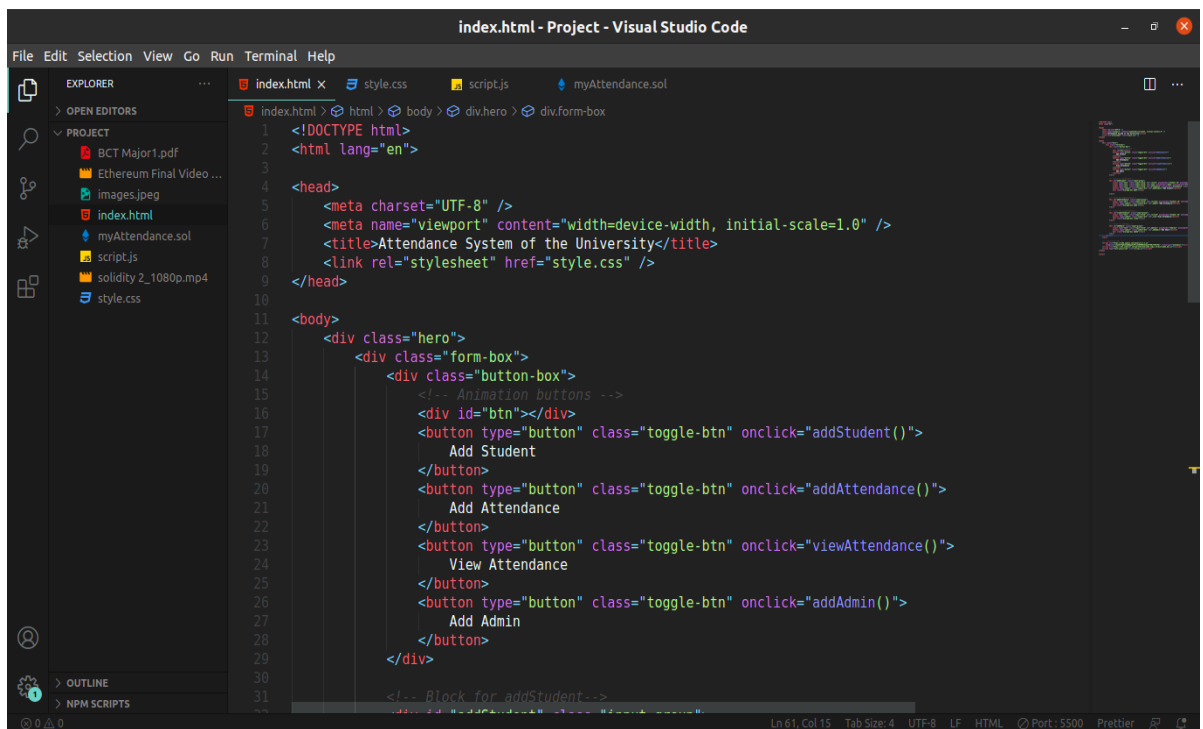
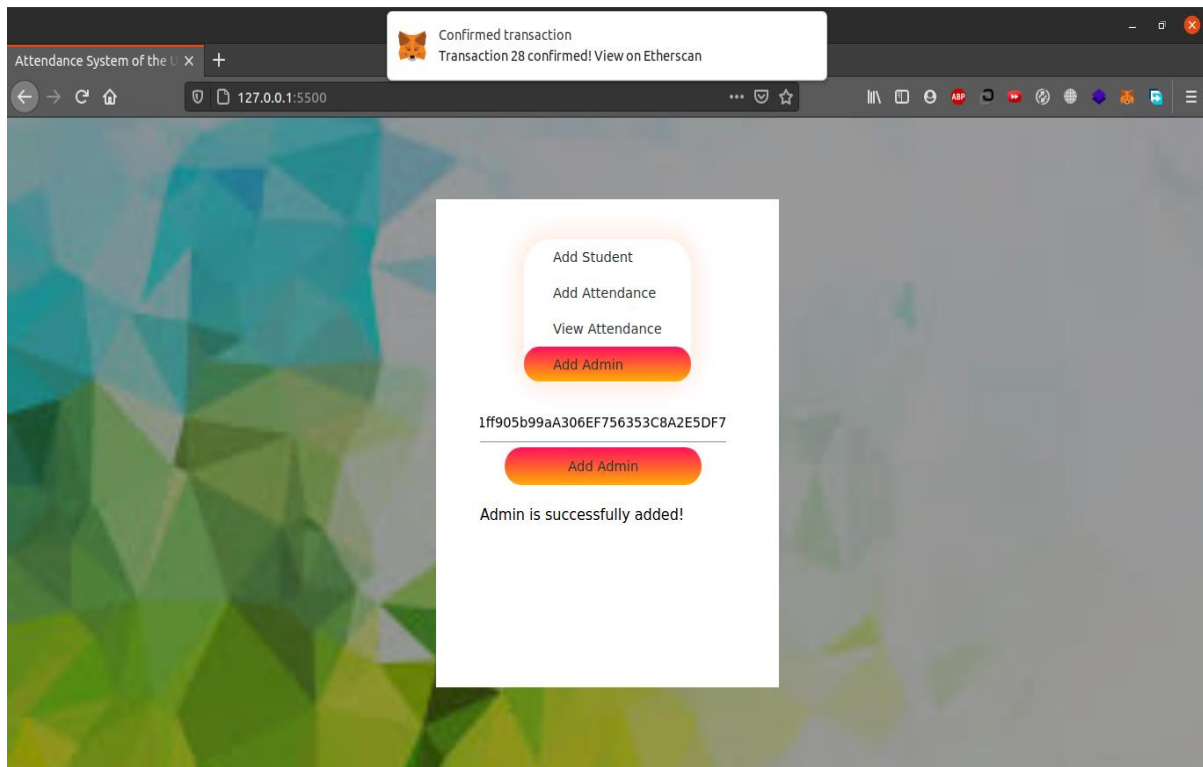












index.html - Project - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER

index.html x style.css script.js myAttendance.sol

index.html > html > body > div.hero > div.form-box

```
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```

```
<!-- Block for addStudent-->
<div id="addStudent" class="input-group">
  <input type="text" class="input-field" id="rollno" placeholder="Student Id" autocomp
  <input type="text" class="input-field" id="name" placeholder="Name" autocomplete="of
  <input type="text" class="input-field" id="attendance" placeholder="Attendance" aut
  <button type="submit" class="submit-btn" id="_addStudent">Add Student</button>
  <div class="dialoge-box addS"></div>
</div>

<!-- Block for addAttendance-->
<div id="addAttendance" class="input-group">
  <input type="text" class="input-field" id="rollnoA" placeholder="Student Id" autocomp
  <button type="submit" class="submit-btn" id="_addAtt">Add Attendance</button>
  <div class="dialoge-box addA"></div>
</div>

<!-- Block for viewAttendance-->
<div id="viewAttendance" class="input-group">
  <input type="text" class="input-field" id="rollnoV" placeholder="Student Id" autocomp
  <button type="submit" class="submit-btn" id="_view">View Attendance</button>
  <div class="dialoge-box viewA"></div>
</div>

<!-- Block for addAdmin -->
<div id="addAdmin" class="input-group">
  <input type="text" class="input-field" id="address" placeholder="Address" autocomplete
  <button type="submit" class="submit-btn" id="_addAdmin">Add Admin</button>
  <div class="dialoge-box addAd"></div>
</div>
```

Ln 61, Col 15 Tab Size: 4 UTF-8 LF HTML Port: 5500 Prettier

index.html - Project - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER

index.html x style.css script.js myAttendance.sol

index.html > html > body > div.hero > div.form-box

```
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```

```
<!-- Block for addAdmin -->
<div id="addAdmin" class="input-group">
  <input type="text" class="input-field" id="address" placeholder="Address" autocomplete
  <button type="submit" class="submit-btn" id="_addAdmin">Add Admin</button>
  <div class="dialoge-box addAd"></div>
</div>

</div>

<!-- javascript code -->
<script src="https://code.jquery.com/jquery-3.4.1.js"
  integrity="sha256-Wp0ohJ0qMqqyKL9FccASB900KwACQJpFTUBLTYOYVvVU=" crossorigin="anonymous"></scr
  <script src="https://cdn.jsdelivr.net/gh/ethereum/web3.js@1.2.6/dist/web3.min.js"></script>
  <script type="text/javascript" src="/script.js"></script>
</body>
</html>
```

Ln 61, Col 15 Tab Size: 4 UTF-8 LF HTML Port: 5500 Prettier

script.js - Project - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER

index.html style.css script.js x myAttendance.sol

script.js > ready() callback > click() callback

```
1 var contract;
2 var address = "0x1faa27a2c63fc63f09b06131e3f0a983a7cfa87b";
3 var abi = [
4   {
5     inputs: [],
6     stateMutability: "nonpayable",
7     type: "constructor",
8   },
9   {
10    inputs: [
11      {
12        internalType: "address",
13        name: "adr",
14        type: "address",
15      },
16    ],
17    name: "addAdmin",
18    outputs: [],
19    stateMutability: "nonpayable",
20    type: "function",
21  },
22  {
23    inputs: [
24      {
25        internalType: "int256",
26        name: "_rollno",
27        type: "int256",
28      },
29    ],
30    name: "addAttendance",
31    outputs: [],
```

Ln 127, Col 16 Spaces: 4 UTF-8 LF JavaScript Port: 5500 Prettier

script.js - Project - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER

index.html style.css script.js x myAttendance.sol

script.js > ready() callback > click() callback

```
25     internalType: "int256",
26     name: "_rollno",
27     type: "int256",
28   },
29   },
30   name: "addAttendance",
31   outputs: [],
32   stateMutability: "nonpayable",
33   type: "function",
34 },
35 {
36   inputs: [
37     {
38       internalType: "int256",
39       name: "_rollno",
40       type: "int256",
41     },
42     {
43       internalType: "string",
44       name: "_name",
45       type: "string",
46     },
47     {
48       internalType: "int256",
49       name: "_attendance",
50       type: "int256",
51     },
52   ],
53   name: "addStudent",
54   outputs: [],
55   stateMutability: "nonpayable",
```

Ln 127, Col 16 Spaces: 4 UTF-8 LF JavaScript Port: 5500 Prettier

script.js - Project - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER

index.html style.css script.js myAttendance.sol

script.js

```
ready() callback > click() callback
{
  inputs: [
    {
      internalType: "int256",
      name: "rollno",
      type: "int256",
    },
  ],
  name: "viewAttendance",
  outputs: [
    {
      components: [
        {
          internalType: "int256",
          name: "rollno",
          type: "int256",
        },
        {
          internalType: "string",
          name: "name",
          type: "string",
        },
        {
          internalType: "int256",
          name: "attendance",
          type: "int256",
        },
      ],
      internalType: "struct MyAttendance.Student1",
      name: "",
      type: "tuple",
    },
  ],
}
```

Ln 127, Col 16 Spaces: 4 UTF-8 LF JavaScript Port: 5500 Prettier

script.js - Project - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER

index.html style.css script.js myAttendance.sol

script.js

```
name: "",
type: "tuple",
},
stateMutability: "view",
type: "function",
},
];

web3 = new Web3(web3.currentProvider);
contract = new web3.eth.Contract(abi, address);
var check = false;

$(document).ready(function () {
  // This function execute when addStudent button is pressed
  $("#addStudent").click(function () {
    web3.eth
      .getAccounts()
      .then(function (accounts) {
        var acct = accounts[0];
        var sid = $("#rollno").val();
        var name = $("#name").val();
        var attendance = $("#attendance").val();

        if (sid && name && attendance) {
          check = true;
          return contract.methods
            .addStudent(sid, name, attendance)
            .send({ from: acct });
        } else {

```

Ln 127, Col 16 Spaces: 4 UTF-8 LF JavaScript Port: 5500 Prettier

script.js - Project - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER

index.html style.css script.js X myAttendance.sol

OPEN EDITORS

PROJECT

BCT Major1.pdf
Ethereum Final Video ...
images.jpeg
index.html
myAttendance.sol
script.js
solidity_2_1080p.mp4
style.css

OUTLINE

NPM SCRIPTS

```
122 console.log(trx);  
123 if (check) {  
124   $(".addS").text('Student attendance is successfully added!');  
125   check = false;  
126 }  
127 });  
128  
129  
130 // This function execute when addAttendance button is pressed  
131 $("#addAtt").click(function () {  
132   web3.eth  
133     .getAccounts()  
134     .then(function (accounts) {  
135       var acct = accounts[0];  
136       var sid = $("#_rollnoA").val();  
137       if (sid) {  
138         check = true;  
139         return contract.methods.addAttendance(sid).send({ from: acct });  
140       }  
141       else {  
142         $(".addA").text('Fill detail correctly!');  
143       }  
144     })  
145     .then(function (trx) {  
146       console.log(trx);  
147       if (check) {  
148         $(".addA").text('Attendance is updated!');  
149         check = false;  
150       }  
151     });  
152 });
```

Ln 127, Col 16 Spaces: 4 UTF-8 LF JavaScript Port: 5500 Prettier

script.js - Project - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER

index.html style.css script.js X myAttendance.sol

OPEN EDITORS

PROJECT

BCT Major1.pdf
Ethereum Final Video ...
images.jpeg
index.html
myAttendance.sol
script.js
solidity_2_1080p.mp4
style.css

OUTLINE

NPM SCRIPTS

```
153  
154 // This function execute when ViewAttendance button is pressed  
155 $("#_view").click(function () {  
156   var rollno = parseInt($("#_rollnoV").val());  
157   if (rollno) {  
158     contract.methods.viewAttendance(rollno).call(function (err, res) {  
159       if (err) {  
160         console.log();  
161       }  
162       if (res[1]) {  
163         $(".viewA").text('Name: ' + res[1] + ', Attendance: ' + res[2]);  
164         console.log(res);  
165       }  
166       else {  
167         $(".viewA").text('Fill valid student Id!');  
168       }  
169     });  
170   }  
171   else {  
172     $(".viewA").text('Fill detail correctly!');  
173   }  
174  
175 // This function execute when addAdmin button is pressed  
176 $("#_addAdmin").click(function () {  
177   web3.eth  
178     .getAccounts()  
179     .then(function (accounts) {  
180       var acct = accounts[0];  
181       var address = $("#_address").val();  
182       if (address) {  
183         check = true;  
184         return contract.methods.addAdmin(address).send({ from: acct });  
185       }  
186     });  
187   }  
188   else {  
189     $(".addA").text('Fill detail correctly!');  
190   }  
191 }  
192 });
```

Ln 127, Col 16 Spaces: 4 UTF-8 LF JavaScript Port: 5500 Prettier

The screenshot shows the Visual Studio Code editor with the file 'script.js' open. The code is a JavaScript file for a student attendance system. It includes a jQuery click event handler for the 'addAdmin' button, which calls a 'click()' function. This function then calls a 'ready()' function, which in turn calls a 'click()' function. The 'click()' function checks if the 'addAdmin' button is clicked and if the 'addAdmin' button is not disabled. If both conditions are met, it calls the 'addStudent()' function. The 'addStudent()' function sets the left position of the 'addStudent' dialog box to '50px', the 'addAttendance' dialog box to '450px', the 'viewAttendance' dialog box to '-380px', and the 'addAdmin' dialog box to '450px'. It also sets the top position of the 'btn' button to '0'. Finally, it calls the 'addAttendance()' function. The 'addAttendance()' function sets the left position of the 'addStudent' dialog box to '450px', the 'addAttendance' dialog box to '50px', the 'viewAttendance' dialog box to '-380px', and the 'addAdmin' dialog box to '450px'. It also sets the top position of the 'btn' button to '37px'. Finally, it calls the 'viewAttendance()' function. The 'viewAttendance()' function sets the left position of the 'addStudent' dialog box to '-380px', the 'addAttendance' dialog box to '450px', and the 'viewAttendance' dialog box to '50px'.

```
186 ready() callback > click() callback
187 $.addAdmin).text('Fill detail correctly!');
188
189 .then(function (trx) {
190   console.log(trx);
191   if (check) {
192     $.addAdmin).text('Admin is successfully added!');
193     check = false;
194   }
195 });
196
197 // Javascript for Animation
198 var addSdt = document.getElementById("addStudent");
199 var addAtd = document.getElementById("addAttendance");
200 var viewAtd = document.getElementById("viewAttendance");
201 var addAdn = document.getElementById("addAdmin");
202 var btn = document.getElementById("btn");
203
204 function addStudent() {
205   addSdt.style.left = "50px";
206   addAtd.style.left = "450px";
207   viewAtd.style.left = "-380px";
208   addAdn.style.left = "450px";
209   btn.style.top = "0";
210   $(".dialog-box").text("");
211 }
212
213 function addAttendance() {
214   addSdt.style.left = "450px";
215   addAtd.style.left = "50px";
216   viewAtd.style.left = "-380px";
217   addAdn.style.left = "450px";
218   btn.style.top = "37px";
219   $(".dialog-box").text("");
220 }
221
222 function viewAttendance() {
223   addSdt.style.left = "-380px";
224   addAtd.style.left = "450px";
225   viewAtd.style.left = "50px";
226 }
```

The screenshot shows the Visual Studio Code editor with the file 'script.js' open. The code is a JavaScript file for a student attendance system. It includes a jQuery click event handler for the 'addAdmin' button, which calls a 'click()' function. This function then calls a 'ready()' function, which in turn calls a 'click()' function. The 'click()' function checks if the 'addAdmin' button is clicked and if the 'addAdmin' button is not disabled. If both conditions are met, it calls the 'addStudent()' function. The 'addStudent()' function sets the left position of the 'addStudent' dialog box to '50px', the 'addAttendance' dialog box to '450px', the 'viewAttendance' dialog box to '-380px', and the 'addAdmin' dialog box to '450px'. It also sets the top position of the 'btn' button to '0'. Finally, it calls the 'addAttendance()' function. The 'addAttendance()' function sets the left position of the 'addStudent' dialog box to '450px', the 'addAttendance' dialog box to '50px', the 'viewAttendance' dialog box to '-380px', and the 'addAdmin' dialog box to '450px'. It also sets the top position of the 'btn' button to '37px'. Finally, it calls the 'viewAttendance()' function. The 'viewAttendance()' function sets the left position of the 'addStudent' dialog box to '-380px', the 'addAttendance' dialog box to '450px', and the 'viewAttendance' dialog box to '50px'.

```
196 ready() callback > click() callback
197 $.addAdmin).text('Fill detail correctly!');
198
199 .then(function (trx) {
200   console.log(trx);
201   if (check) {
202     $.addAdmin).text('Admin is successfully added!');
203     check = false;
204   }
205 });
206
207 // Javascript for Animation
208 var addSdt = document.getElementById("addStudent");
209 var addAtd = document.getElementById("addAttendance");
210 var viewAtd = document.getElementById("viewAttendance");
211 var addAdn = document.getElementById("addAdmin");
212 var btn = document.getElementById("btn");
213
214 function addStudent() {
215   addSdt.style.left = "50px";
216   addAtd.style.left = "450px";
217   viewAtd.style.left = "-380px";
218   addAdn.style.left = "450px";
219   btn.style.top = "0";
220   $(".dialog-box").text("");
221 }
222
223 function addAttendance() {
224   addSdt.style.left = "450px";
225   addAtd.style.left = "50px";
226   viewAtd.style.left = "-380px";
227   addAdn.style.left = "450px";
228   btn.style.top = "37px";
229   $(".dialog-box").text("");
230 }
231
232 function viewAttendance() {
233   addSdt.style.left = "-380px";
234   addAtd.style.left = "450px";
235   viewAtd.style.left = "50px";
236 }
```

script.js - Project - Visual Studio Code

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EXPLORER

OPEN EDITORS

PROJECT

BCT Major1.pdf

Ethereum Final Video ...

images.jpeg

index.html

myAttendance.sol

script.js

solidity 2_1080p.mp4

style.css

script.js > ready() callback > click() callback

```
222
223
224 function viewAttendance() {
225     addSdt.style.left = "-380px";
226     addAtd.style.left = "450px";
227     viewAtd.style.left = "50px";
228     addAdn.style.left = "450px";
229     btn.style.top = "74px";
230     $(".dialoge-box").text("");
231 }
232
233 function addAdmin() {
234     addSdt.style.left = "450px";
235     addAtd.style.left = "450px";
236     viewAtd.style.left = "-380px";
237     addAdn.style.left = "50px";
238     btn.style.top = "108px";
239     $(".dialoge-box").text("");
240 }
241 // addStudent
242 // addAttendance
243 // viewAttendance
244 // addAdmin
```

Ln 127, Col 16 Spaces: 4 UTF-8 LF JavaScript Port: 5500 Prettier

style.css - Project - Visual Studio Code

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EXPLORER

OPEN EDITORS

PROJECT

BCT Major1.pdf

Ethereum Final Video ...

images.jpeg

index.html

myAttendance.sol

script.js

solidity 2_1080p.mp4

style.css

style.css > .submit-btn

```
1 *
2 {
3     margin: 0;
4     padding: 0;
5     font-family: sans-serif;
6 }
7
8 .hero {
9     height: 100%;
10    width: 100%;
11    background-image: linear-gradient(rgba(0, 0, 0, 0.4), rgba(0, 0, 0, 0.4)),
12    url(images.jpeg);
13    background-position: center;
14    background-size: cover;
15    position: absolute;
16 }
17
18 .form-box {
19     width: 380px;
20     height: 480px;
21     position: relative;
22     /* top: 40px; */
23     margin: 6% auto;
24     background: white;
25     padding: 5px;
26     overflow: hidden;
27 }
28
29 .button-box {
30     width: 190px;
31     margin: 35px auto;
32     position: relative;
```

Ln 85, Col 2 Spaces: 2 UTF-8 LF CSS Port: 5500 Prettier

