

# Blockchain Project On Attendance System

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## 1.Add Student

The screenshot shows a web application interface for adding a student. The form has two input fields: 'Student ID' with the value '5' and 'Name' with the value 'Ravi'. Below these fields is an 'Add' button. A red arrow points from the 'Add' button to a text box that says: "I am adding the Student with Its Student ID(Roll no) and Name,when I click on "Add" Button Metamask wallet appear for Transaction confirmation,then I click on "Confirm"".

Below the 'Add Student' form is the 'Add Attendance & View Attendance' section, which has a 'RollNo' input field and an 'Add' button. Below that is the 'Add Admin' section, which has a 'New Admin' input field and an 'Add' button.

On the right side of the screenshot, there is a MetaMask notification window titled 'MetaMask Notification' showing a transaction confirmation. The transaction is for '0.000554' ETH. The 'Confirm' button is highlighted in blue.

Below the 'Add Student' form, there is a console window showing the message 'localhost says successfully added' with an 'OK' button. A red arrow points from this message to a text box that says: "We successfully made a transaction (It means we have added a student who's name is "Ravi" and Roll no is "5" and his default attendance count is "0" until admin add his attendance)".

At the bottom right, there is a MetaMask notification window titled 'MetaMask • now' showing a 'Confirmed transaction' with the message 'Transaction 23 confirmed! View on Etherscan'.

Now, we check attendance of Student “Ravi”. It shows 0 attendance count for Ravi because Admin hasn’t take the attendance of “Ravi”

### Add Student

Student ID  Name

### Add Attendance & View Attendance

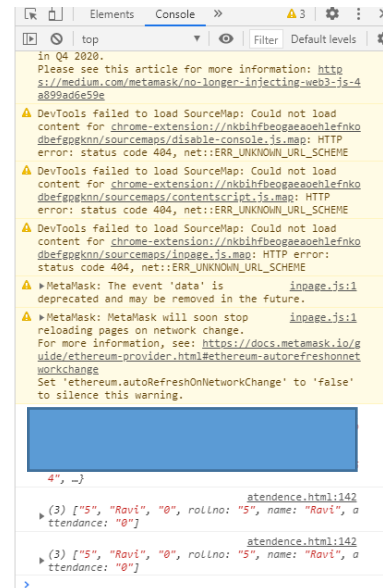
RollNo    
Roll no, Name, Attendance

### Add Admin

New Admin

2. Click on View

3. Default Attendance count of Ravi is 0



## 2. ADD Attendance

In next screenshot, we will add the attendance of Student “Ravi” with its Roll no or Student id “5”

### Add Student

Student ID  Name

### Add Attendance & View Attendance

RollNo    
Roll no, Name, Attendance

### Add Admin

New Admin

1. Enter Roll no "5" of Ravi

2. Click on Add

3. Click on metamask's "Confirm" button to confirm Transaction

#### MetaMask Notification

Account 1 → 0x10aC...69...

CONTRACT INTERACTION

0

DETAILS DATA

GAS FEE 0.000357  
No Conversion Rate Available

Gas Price (GWEI) 5.480901211 Gas Limit 65128

AMOUNT + GAS FEE

TOTAL 0.000357  
No Conversion Rate Available

The screenshot shows the browser's developer console with several DevTools errors related to loading SourceMaps and MetaMask warnings. At the bottom, a JSON response is visible: 

```
{"rollNo": 5, "name": "Ravi", "attendance": 0}
```

### Add Student

Student ID  Name

localhost says  
successfully added

### Add Attendance & View Attendance

RollNo

Roll no, Name, Attendance

### Add Admin

New Admin

We have added the Ravi's attendance Successfully

## 3. View Attendance

### Add Student

Student ID  Name

### Add Attendance & View Attendance

1. Enter Roll no  
RollNo

Roll no, Name, Attendance   2. Click on View

### Add Admin

New Admin

as you can see, Ravi's Attendance count is increased by 1

#### 4. Authentication-1(Only admin can add the student and attendance)

Ans-

"Only owner (Admin) can call this function."

modifier **onlyOwner**

```
{  
    require(Admin[msg.sender] == 1);  
    _;  
}
```

applies **onlyOwner** to the `'addStudent()'`, `'addAttendance()'` `'viewattendance()'` and `'addAdmin()'` function, which causes that calls to these function only have an effect if they are made by the stored owner.

function addStudent( int256 \_rollno ,string memory \_name,int \_attendance) **public onlyOwner**

```
{  
    students[_rollno] = Student1(_rollno,_name,_attendance) ;  
}
```

function viewAttendance(int \_rollno ) view public returns(Student1 memory) **public onlyOwner**

```
{  
    return students[_rollno];  
}
```

function addAttendance(int \_rollno) **public onlyOwner**

```
{  
    students[_rollno].attendance+=1 ;  
}
```

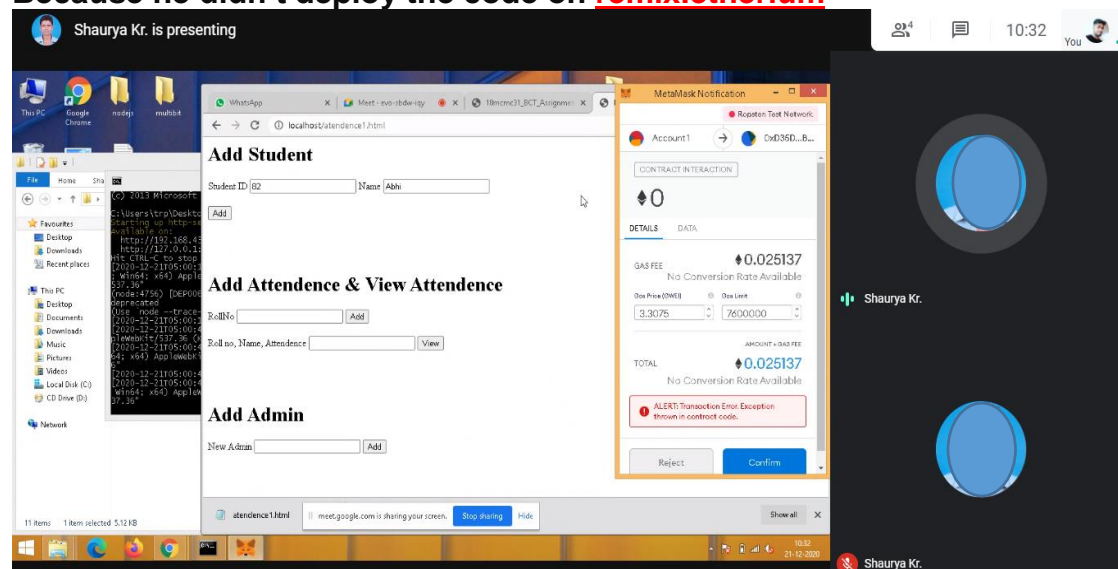
function addAdmin(address adr) **public onlyOwner**

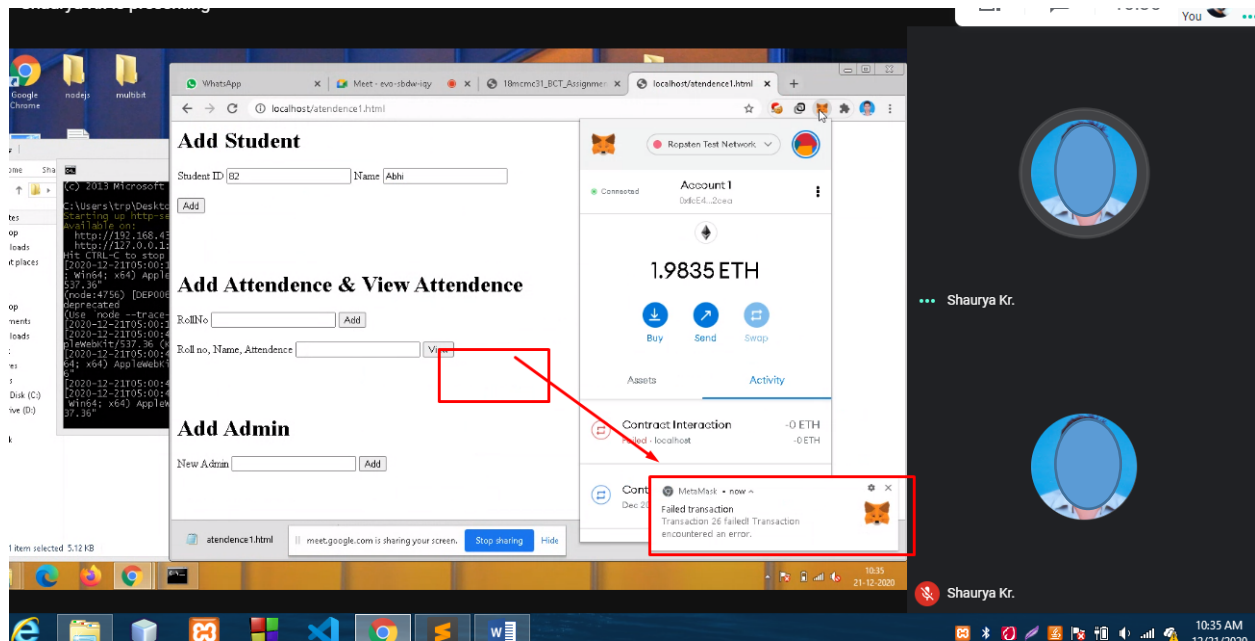
```
{  
    Admin[adr] = 1 ;  
}
```

#### 5. Authentication-2(Admin can add many persons as admin)

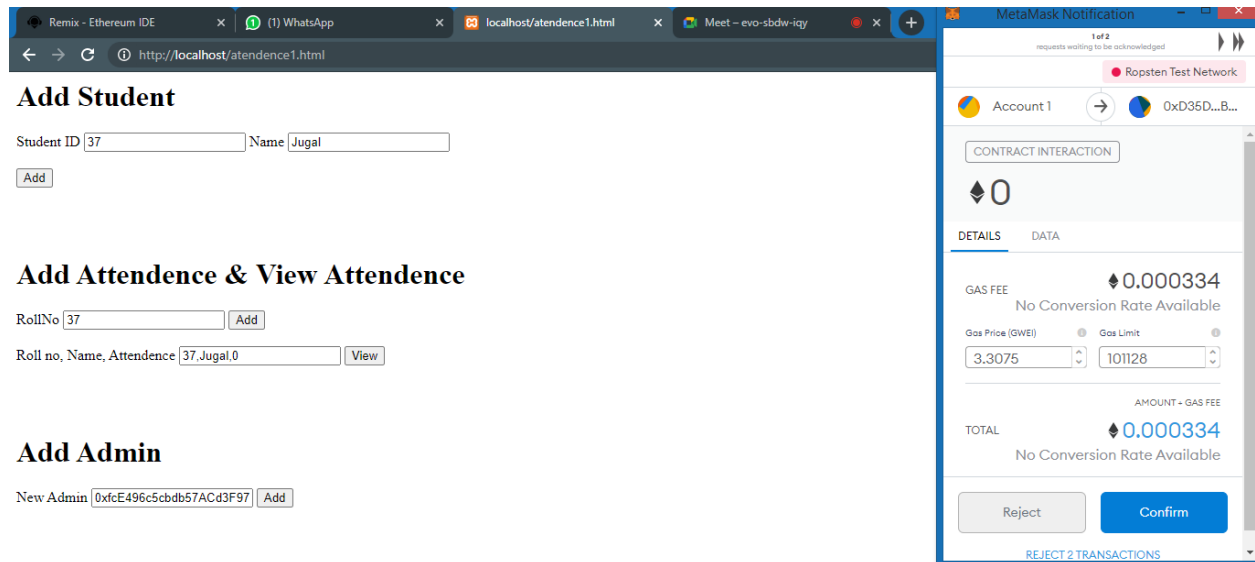
Basically I share my code to one of my friend and currently he is not admin

Because he didn't deploy the code on **remix.ethereum**

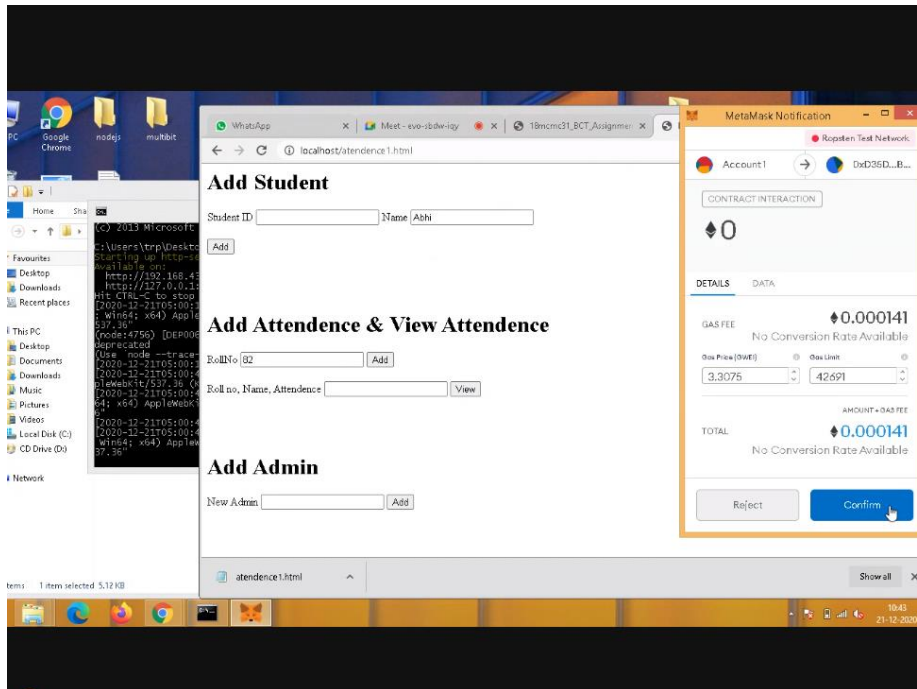




## Now add him as admin



Now, He has been added as a admin.



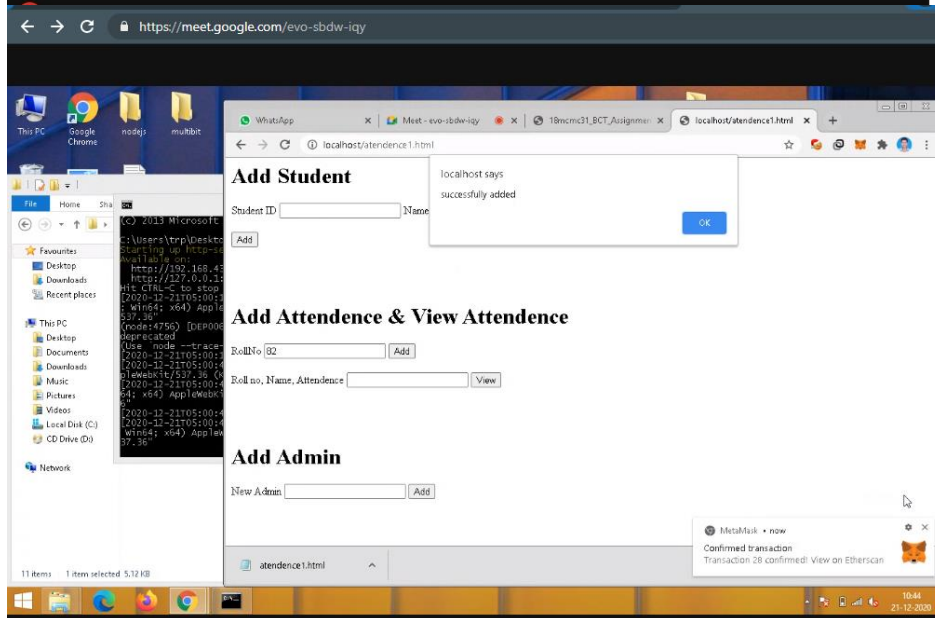
## Meeting details

People (4)

Chat

Add people

IN CALL



## Meeting details

People (4)

Chat

Add people

IN CALL

