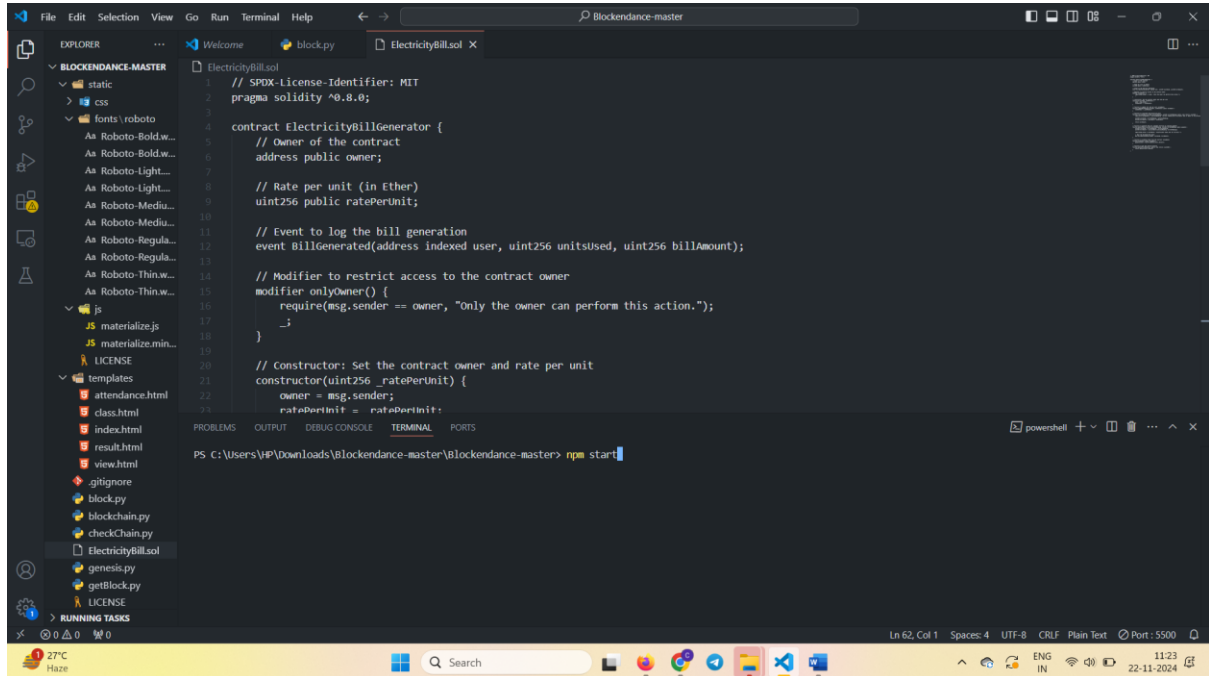


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CHERUKURI.PRASANNA LAKSHMI

CODE :



The screenshot shows the Visual Studio Code interface with the 'BLOCKENDANCE-MASTER' project open. The Explorer panel on the left shows the project structure, including folders for 'static', 'css', 'fonts', 'js', and 'templates'. The 'ElectricityBill.sol' file is selected in the Explorer and its content is displayed in the main editor. The code is a Solidity smart contract for an electricity bill generator. The terminal at the bottom shows the command 'PS C:\Users\VP\Downloads\Blockendace-master\Blockendace-master> npm start'.

```
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.0;

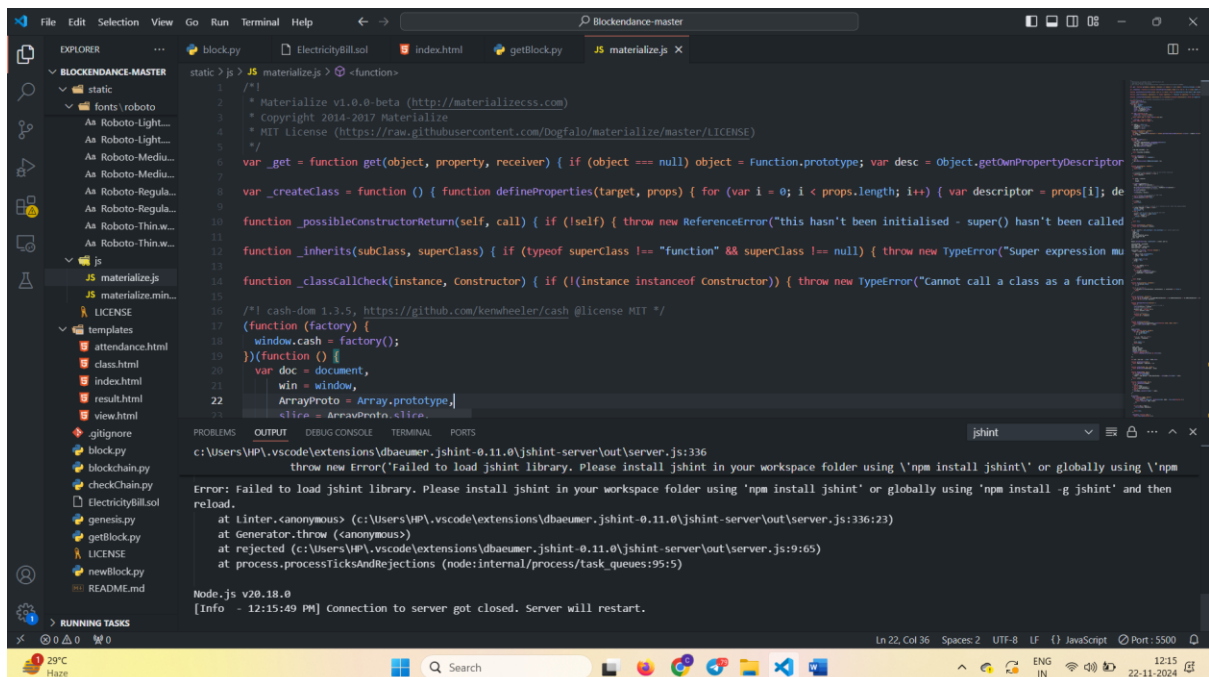
contract ElectricityBillGenerator {
    // Owner of the contract
    address public owner;

    // Rate per unit (in ether)
    uint256 public ratePerUnit;

    // Event to log the bill generation
    event BillGenerated(address indexed user, uint256 unitsUsed, uint256 billAmount);

    // Modifier to restrict access to the contract owner
    modifier onlyOwner() {
        require(msg.sender == owner, "Only the owner can perform this action.");
    }

    // Constructor: Set the contract owner and rate per unit
    constructor(uint256 _ratePerUnit) {
        owner = msg.sender;
        ratePerUnit = _ratePerUnit;
    }
}
```

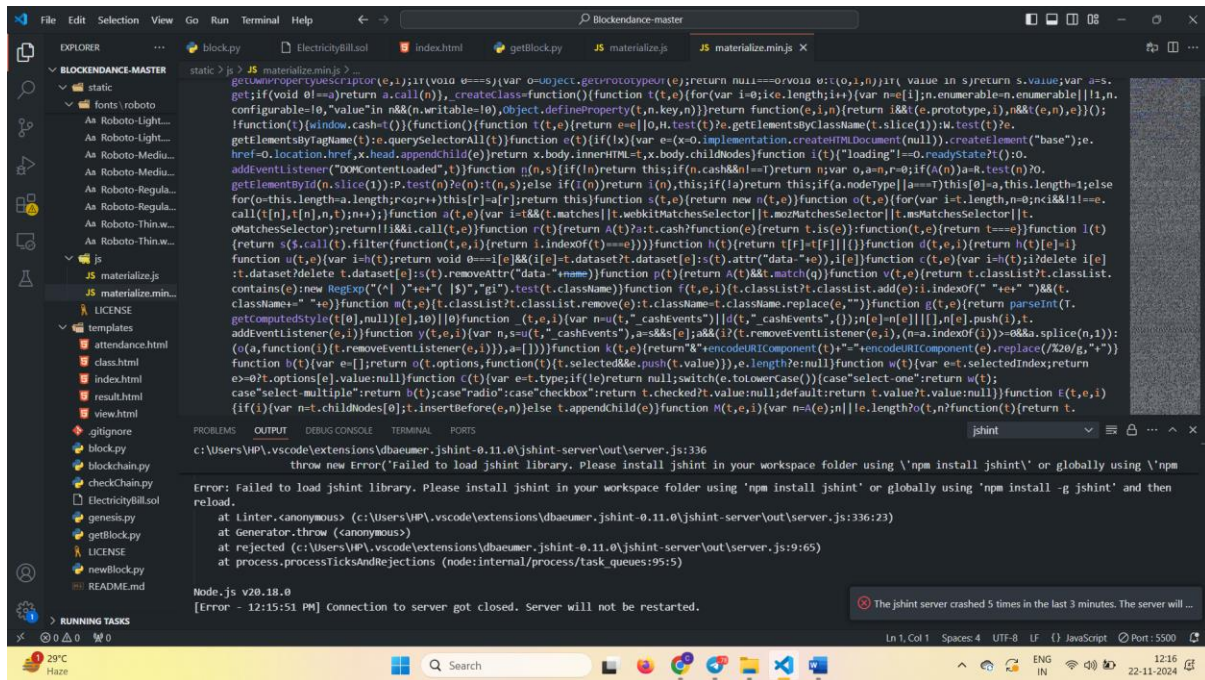


The screenshot shows the Visual Studio Code interface with the 'BLOCKENDANCE-MASTER' project open. The Explorer panel on the left shows the project structure, including folders for 'static', 'css', 'fonts', 'js', and 'templates'. The 'materialize.js' file is selected in the Explorer and its content is displayed in the main editor. The code is a JavaScript file that defines a 'Materialize' class and a 'factory' function. The terminal at the bottom shows an error message: 'Error: Failed to load jshint library. Please install jshint in your workspace folder using 'npm install jshint' or globally using 'npm install -g jshint' and then reload.'

```
static > js > materialize.js > <-function>
1  /*
2  * Materialize v1.0.0-beta (http://materializecss.com)
3  * Copyright 2014-2017 Materialize
4  * MIT License (https://raw.githubusercontent.com/Dogfalo/materialize/master/LICENSE)
5  */
6  var _get = function get(object, property, receiver) { if (object == null) object = Function.prototype; var desc = Object.getOwnPropertyDescriptor
7  var _createClass = function () { function defineProperties(target, props) { for (var i = 0; i < props.length; i++) { var descriptor = props[i]; de
8  function _possibleConstructorReturn(self, call) { if (!self) { throw new ReferenceError("this hasn't been initialised - super() hasn't been called
9  function _inherits(subClass, superClass) { if (typeof superClass !== "function" && superClass !== null) { throw new TypeError("Super expression mu
10 function _classCallCheck(instance, Constructor) { if (!(instance instanceof Constructor)) { throw new TypeError("Cannot call a class as a function
11
12 function _classCallCheck(instance, Constructor) { if (!(instance instanceof Constructor)) { throw new TypeError("Cannot call a class as a function
13
14 function _classCallCheck(instance, Constructor) { if (!(instance instanceof Constructor)) { throw new TypeError("Cannot call a class as a function
15
16 /*! cash-dom 1.3.5, https://github.com/kemwheeler/cash @license MIT */
17 (function (factory) {
18   window.cash = factory();
19 })(function () {
20   var doc = document,
21       win = window,
22       ArrayProto = Array.prototype,
23       slice = ArrayProto.slice,
24
25   // Linter: anonymous
26   at Linter: anonymous (c:\Users\VP\.vscode\extensions\dbaeumer.jshint-0.11.0\jshint-server\out\server.js:336:23)
27   throw new Error("Failed to load jshint library. Please install jshint in your workspace folder using 'npm install jshint' or globally using 'npm install -g jshint' and then
28   reload.
29   at Linter: anonymous (c:\Users\VP\.vscode\extensions\dbaeumer.jshint-0.11.0\jshint-server\out\server.js:336:23)
30   at Generator.throw (anonymous)
31   at rejected (c:\Users\VP\.vscode\extensions\dbaeumer.jshint-0.11.0\jshint-server\out\server.js:9:65)
32   at process.processTicksAndRejections (node:internal/process/task_queues:95:5)
33
34 Node.js v20.18.0
35 [Info - 12:15:49 PM] Connection to server got closed. Server will restart.
```

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CHERUKURI.PRASANNA LAKSHMI



1. Install MetaMask

Steps:

Open your web browser (preferably Chrome or Firefox).

Go to the MetaMask website.

Click on "Download."

Select your browser's extension store (Chrome Web Store for Chrome or Add-ons for Firefox).

Install the MetaMask extension.

Open the MetaMask extension and set up your wallet:

Create a new wallet or import an existing one.

Securely save your seed phrase.

2. Install Ganache

Steps:

Visit the Ganache website.

Download the appropriate version for your operating system (Windows, macOS, or Linux).

Run the installer and follow the instructions.

Open Ganache and select the desired workspace:

Quickstart Ethereum for a private blockchain.

Create a new workspace for advanced configuration.

2200030023

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3. Transfer Ether Between Ganache Accounts Using MetaMask

Steps:

Open Ganache and copy the private key of an account.

Open MetaMask and add a new account using the private key.

Use another Ganache account as the recipient by copying its address.

In MetaMask:

Go to the "Send" section.

Paste the recipient's address.

Enter the amount of Ether to send.

Confirm the transaction.

4. Transfer Ether on Sepolia Test Network

Steps:

Open MetaMask and switch to the Sepolia test network.

Use a Sepolia faucet to get test Ether. Search "Sepolia Faucet" and follow the instructions to receive test Ether in your account.

Transfer Ether:

Go to "Send" in MetaMask.

Paste the recipient's Sepolia address.

Enter the amount to send.

Confirm the transaction.

5. Execute a Local Smart Contract Using Ganache

Steps:

Deploy a smart contract:

Write a Solidity contract and compile it in Remix or a development framework like Truffle.

Connect Remix to Ganache by adding a custom RPC network in MetaMask with Ganache's details.

Deploy the contract using one of the Ganache accounts.

Interact with the contract:

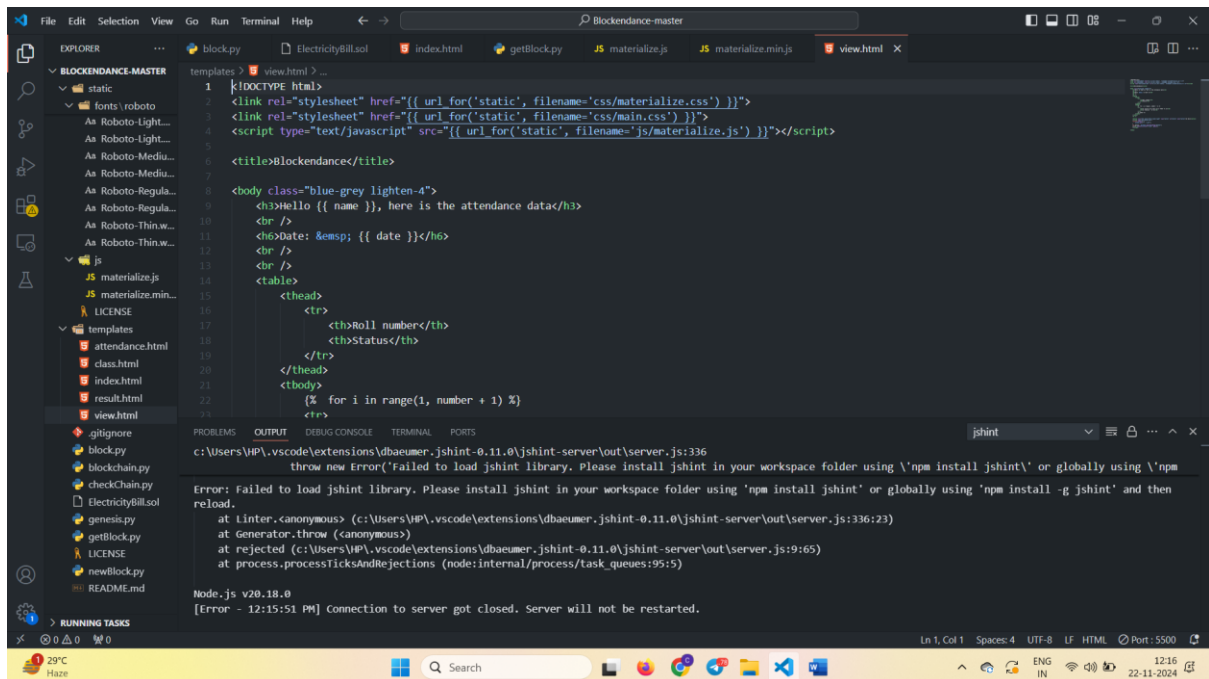
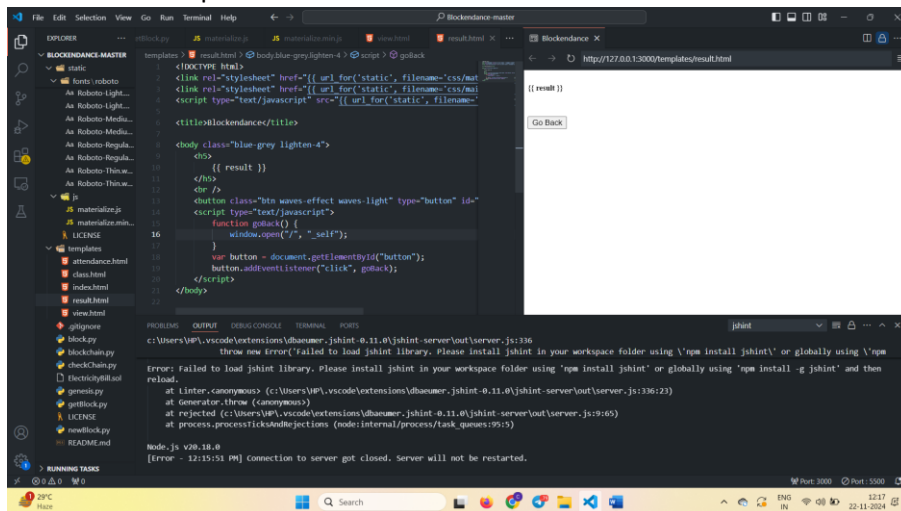
Use the deployed contract's functions in Remix.

Sign transactions with MetaMask to execute the functions.

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Check the updated state on the Ganache GUI.



CHECK MY PROJECT OUTPUTS
UPLOADED BELOW

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The screenshot shows a web browser window with the title "Electricity Bill Calculator". The address bar shows "localhost:3000". The browser's bookmark bar includes links to Gmail, YouTube, and various project repositories. The web application has a yellow background with a magenta header bar that reads "ANDHRA PRADESH ELECTRICITY BILL GENERATOR - APSPDCL". In the center, there is a white box containing the "Electricity Bill Calculator" form. The form includes a logo for "UNIVERSITY UNIVERSITY", two input fields for "Previous Meter Reading" (containing "44") and "Current Meter Reading" (containing "567890348"), and a "Generate Bill" button. The Windows taskbar at the bottom shows a temperature of 27°C, a search bar, and system icons for date and time (11:25, 22-11-2024).

Electricity Bill Calculator

ANDHRA PRADESH ELECTRICITY BILL GENERATOR - APSPDCL

UNIVERSITY UNIVERSITY

Electricity Bill Calculator

Previous Meter Reading:

44

Current Meter Reading:

567890348

Generate Bill

OUTPUT-3

This screenshot shows the same web application after the "Generate Bill" button was clicked. The central white box now displays the "Bill Details". It lists the "Units Used: 24.55", the "Bill in Ether: 77775.333 Ether", and the "Bill in Rupees: ₹500". A green message at the bottom of the box says "Bill Generated, Thank You!". The rest of the interface, including the header, background, and taskbar, remains the same as in the previous screenshot.

ANDHRA PRADESH ELECTRICITY BILL GENERATOR - APSPDCL

Bill Details:

Units Used: 24.55

Bill in Ether: 77775.333 Ether

Bill in Rupees: ₹500

Bill Generated, Thank You!