**Build User Interfaces to Ethereum BlockChain based SmartContracts**

Hello again to the BlockChain community thanks for the enormous support for those of you who joined on the BlockChain Journey with. We have rephrased these series to be one session capsule meetups where we focus on one topic at a time.

This installment of the Capsule Learning we will be discussion about , how to interact with Ethereum SmartContracts from the User Interface using libraries like Web3 and actually make it a Decentralized Distributed Application.

**Should I have prior Knowledge:**

Yes it helps if you know about how to program Solidity and how to write UI code in Angular or React.js. Please look at Pre-requisites section to learn more.

Also if you like to learn a little more the earlier sessions recordings are on youtube and they would help, please go through and join Slack to get into the community acquaint yourself.

Part 1: <https://www.meetup.com/hydemergintech/events/249417296/>

Part 2: <https://www.meetup.com/hydemergintech/events/250400594/>

Part 3: <https://www.meetup.com/hydemergintech/events/251298336/>

If you are not already on please join the BlockChain Slack community - https://goo.gl/forms/XlSsSiG2fHHDrf7b2.

Please go through the recommended learnings before you attend the meetup, believe us it helps immensely to have productive conversations.

**Agenda for this month:**

* The DApp overall architecture
* Writing Smart Contracts for a DApp
* Additional data types we need to learn for Solidity Programming
* Understanding about Web3 JS and using UI elements to interact
* Using require to notate minimum payment associated
* Using payable methods to accept Ether payments
* Building the User Interface that can interact with the Solidity Smart Contract
* Configuring Infura for the application
* Deploy to Infura based Rinkeby network
* DEMO & Hands-on

*Bring your Laptop or Mac, and also BlockChain runs best on Linux/MacOS .. so if you are using windows pls have a Virtual Box image running with Ubuntu Linux 17.10 (contact us if you have questions)*

**Our goal is to be able to bring together people who:**

* Believe BlockChain being their future
* Want to meet like minded people who want to get their hand-on experience for BlockChain
* Want to build Expertise on BlockChain

**About the Speaker / Moderator(s):**

Rishi is as a TOGAF certified Technology Architect working at IBM and has been associated with the BlockChain space for more than an year, and for the past 13 years he has been instrumental in leading projects associated with Enterprise Integration Java/JEE,Open Source for various clients. He is passionate about all things technology but is particularly interested in BlockChain, Augmented Reality, SmartGrids and technologies for Agriculture.

This meetup will have one or more moderators.

**Prerequisite Setup Instructions:**

<https://code.visualstudio.com/>

<https://www.npmjs.com/package/node-windows>

<http://truffleframework.com/ganache/>

<http://truffleframework.com/tutorials/how-to-install-truffle-and-testrpc-on-windows-for-blockchain-development>

<https://github.com/ethereum/go-ethereum/wiki/Installing-Geth>

Optional , but if you can do the below also:

Signup Infura network - <https://infura.io/signup>

Fund Rinkeby Wallet using Faucet - https://faucet.rinkeby.io/

PS: some of these links will have same software being installed, if you have already installed what’s being said you need not install again.

**Here are the recommended learnings that we would like you to go through to better understand about Solidity Smart Contracts and Dapps before attending the next meetup:**

What is a Decentralized Application?

<https://www.coindesk.com/information/what-is-a-decentralized-application-dapp/>

Learn Solidity — The Ethereum smart contract programming language

<https://medium.com/@robbertvermeulen/learn-solidity-the-ethereum-smart-contract-programming-language-7f106fc26d6>

Basics of React JS to help build User Interfaces that interact with Ethereum BlockChain

<https://www.tutorialspoint.com/reactjs/index.htm>

Mocha With Node.js For Test-Driven Development

<https://webapplog.com/tdd/>