## **Blockchain Technology**

**Grp No. – 53** 

Ayush Mishra: 2020A3PS2130H Akshit Aditya: 20202A1PS2509H Kaushik Chetluri: 2020A3PS0476H

## **BuyMeACoffe Dapp**

**Our Idea:-** In this ever-evolving world blockchain technology has become the new normal. Coffee which is a basic need nowadays has been far from being touched by blockchain technology or technology in general hence we thought of building a dapp for a coffe shop. This will promote transparency, trust and fair prices among the consumers.

## **Extra Libraries and Tools used:-**

Used truffle suite for project creation and providing with the basic code for network management etc.

Used Ganache for testing on a local blockchain.

Metamask can be used for frontend collaboration of web3 app.

<u>Our Implementation:</u>- We used Ethereum blockchain using ganache and used Metamask wallet for interfacing our Web3 application. We wrote a smart contract for the shop and then wrote local test files to check its implementation.

## Coffeshop.sol:-

CoffeShopMenu structure is defined containing tax prices, owner address, no of items ordered, menu items and their price.

stringsEquals function is used to compare the the order given by the buyer and the contents of the menu chart. Return type is boolean.

buyltem function has payable keyword to check that the owner account is payable. It checks for the item ordered by the customer using stringEquals and also checks the amount paid by the buyer is equal to the cost of those items.