**Project Synopsis**

**Group No: 19**

**Name of the group members: Shivani Mehta**

**Roll Number of the group members: 18MCA036**

**TITLE:**  A blockchain and cryptocurrency based web appliaction.

**INTRODUCTION:** A blockchain is a decentralized ledger of all transactions across a peer-to-peer network. Using this technology, participants can confirm transactions without a need for a central clearing authority. Potential applications can include fund transfers, settling trades, voting, and many other issues.

In this project, we will be building a Blockchain and Cryptocurrency based application.

The backend will be specifically based on node.js and express. We will be using the test-driven manner where before implementing actual code, we will write our tests and then write our code accordingly, to pass those tests. Jest will be used for the testing purpose.

The front-end of the project will e a web app which will be created in react.js. The web app will allow people from all over the world to use the blockchain and cryptocurrency. For deployment purpose, we will be using Heroku.

All in all, we will be working with top notch technologies. At the same time, we will be following all the modern best practices of full-stack development. Learn the conventions of Node.js and React, and how to properly structure code and projects.

**OBJECTIVE:** To implement an online method to make use of blockchain and cryptocurrency.

**SOFTWARE AND HARDWARE REQUIREMENT:**

Tools: VS code, Postman

Tech Stack: React, node.js, Express, JEST

Deployment: Heroku

H/w: Any PC configuration available with minimum 4GB RAM

**REFERENCES:**

For theory understanding - [https://www.pwc.com/us/en/industries/financial-services/fintech/bitcoin-blockchain-cryptocurrency.html#:~:text=Blockchain%20is%20the%20technology%20that,cryptocurrency%20(among%20other%20things).&text=A%20cryptocurrency%20is%20a%20medium,verify%20the%20transfer%20of%20funds](https://www.pwc.com/us/en/industries/financial-services/fintech/bitcoin-blockchain-cryptocurrency.html" \l ":~:text=Blockchain is the technology that,cryptocurrency (among other things).&text=A cryptocurrency is a medium,verify the transfer of funds).

For Practical implemenation - <https://www.udemy.com/course/build-blockchain-full-stack/>