**GCSE**

**Smart Contract**

*Language*: Solidity (version-0.5.0)

Using **TruffleJS** as a development environment, and **Ganache** as a personalized blockchain.

Using **Metamask extension** for accessing our application in Browser.

Smart contracts I would like to work on are:

1. Creating an asset to the user in the blockchain
2. Selling an asset or shares of an asset to the investor
3. Voting to the asset.

Functionalities of a smart contract:

1. Adding an Asset to the blockchain with the required details
2. Owner can create his asset along with the required details (i.e Tenure, Pricing etc.)
3. Investors or buyers can buy the asset as per the asset details
4. Changing the ownership of the asset after the payment for particular duration
5. Voting to a particular comic book based on the details

***Development Time***: ~10 hours

**Backend**

*Languages used*: JavaScript

*Database*: MongoDB

**Functionalities:**

1. Creating a server using **expressJS** and **NodeJs**
2. Signing-up users separately for Asset providers and Asset Investors
3. Logging-In Users as per user type (Asset Investor & Asset Provider)
4. Storing all the user records along with particular ethereum Addresses in MongoDB
5. Storing all the asset details along with the pricing in Blockchain

***Development time***: ~8 Hours