

# **CS4037D CLOUD COMPUTING**

## **Project Definition, Motivation, Literature Survey**



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## **Project Definition**

This project's aim is to create a portal where we can store a document in a safe and secure environment which would not be tampered in the server side. This will allow us to free up lots of physical space where we store most of the physical documents. Making them digital will not only save space but will also save cost and time. Normal file systems or databases are not totally safe as the data stored can be manipulated by someone on the server side.

Storing the documents in blockchain is a good solution as it would be totally secured. All transactions are managed by smart contracts with fixed rules. As we cannot store the documents directly we have to store it somewhere else and store the hash in blockchain. But we cannot store the documents in a normal file storage system as our aim was to store the documents in a secure place so we chose IPFS storage system which is designed specifically as a files system for blockchain. And all together we created a portal with a front end based on react for modular approach, ultimately creating a portal for storing documents safely and securely.

## **Motivation**

Everyone must have visited government offices and may have noticed stacks of physical files lying on a number of shelves and when we go there to apply for document or get a document we have to wait there in a long queue as it would take lot of time for the staffs to verify the documents as they have to search for it in that pile of documents ultimately making the whole process time consuming and insufficient. Also during flood or any natural calamity there is a chance of the documents getting destroyed or damaged. So we come to a viable solution that is to store the documents digitally. Still storing the documents digitally without any proper environment is a risky thing to do as they can be tampered if storage is not secure enough. So in this project we kept all these problems in mind and created a safe and secure document storing portal.

## Literature Survey

Documents are usually stored in secure locations where there will be proper guards and security systems. Now a days lot many offices are using digital medium for storing documents. One such initiative is digilocker. Also many states have implemented online websites for e-governance like <https://digilocker.gov.in/>, [www.kseb.in](http://www.kseb.in), <http://www.revenue.kerala.gov.in/>, etc where most of the tasks are done digitally. As the vision of our government is of digital india we tried to create a small solution inspired by the digilocker to contribute towards digital india.