Techie Pirates

Blockchain Based Document Administration

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Agenda

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Problem Statement

- The management of student records is a critical task for educational institutions, and the traditional methods of storing and sharing these records are often inefficient and insecure.
- Institutions' current methodology for document management is centralized , unstructured and highly unautomated which increases the probability of human error.
- To address these challenges, this project proposes the development of a blockchain-based student records management system.

How will Blockchain Help

The distributed nature of Academic Records and Systems

What is Blockchain? Why be concerned?

Solving the problem through BaaS

Objectives

- Create a user creation process that will be verified from the specified nodes
- Manage the documents of the user (student in this case) like marksheets ,cgpa, hackathon participation attendance system,etc.
- Provide a system to verify if the given document matches the original document of the user.
- A admin dashboard to view the data statistics
- Share the files with required organisation as per their authority
- Organizations can request details of users or group of users

Literature Survey

Document Verification using Blockchain for Trusted CV Information[1]

- Background verification process implemented by companies is costly, time-consuming, and inefficient.
- Hash values of original documents of job applicants are saved on a consortium blockchain.
- Job applicant details can be verified during the hiring process by comparing hash values on the blockchain.
- This process is efficient, less time-consuming, and cheap to implement for all companies.

Literature Survey

Blockchain Based Framework for Educational Certificates Verification [2]

- Blockchain technology can enhance document verification and combat fraud and misuse.
- Authors identified security themes for document verification in blockchain.
- Gaps and loopholes in current blockchain-based educational certificate verification solutions were identified.
- Proposed a blockchain-based framework using Hyperledger Fabric Framework for verifying educational certificates focusing on authentication, authorization, confidentiality, privacy, and ownership themes.

Literature Survey

A Graduation Certificate Verification Model via Utilization of the Blockchain Technology [3]

- A theoretical model is proposed for academic certificate issuing and verification using blockchain technology.
- Blockchain technology contains functions such as hash, cryptography, digital signatures, peer-to-peer networks, and proof of work.
- The model uses digitally signed academic certificates and verifies them using blockchain technology.

Market Survey

Market Size

Competitors

Proposed Architecture

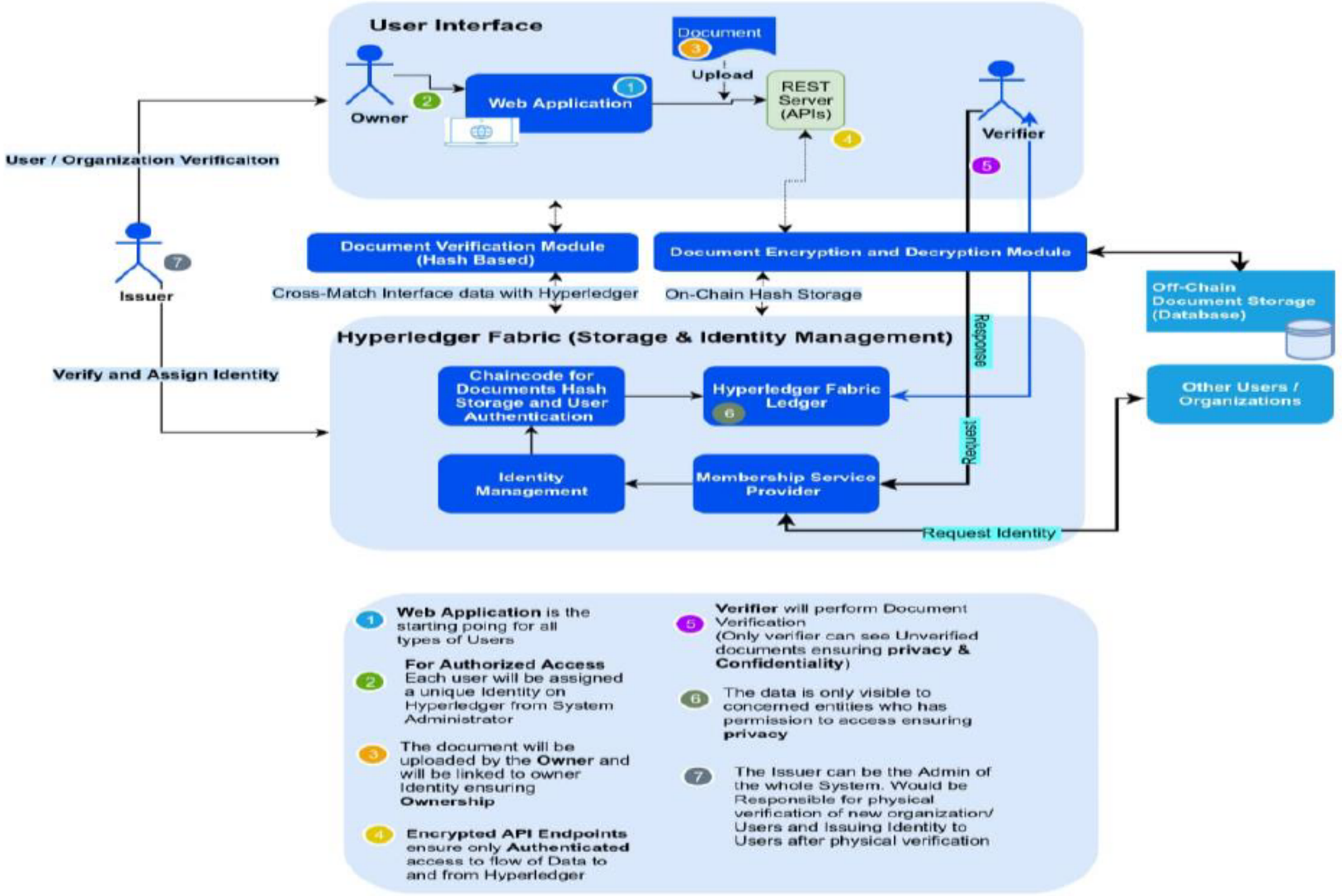
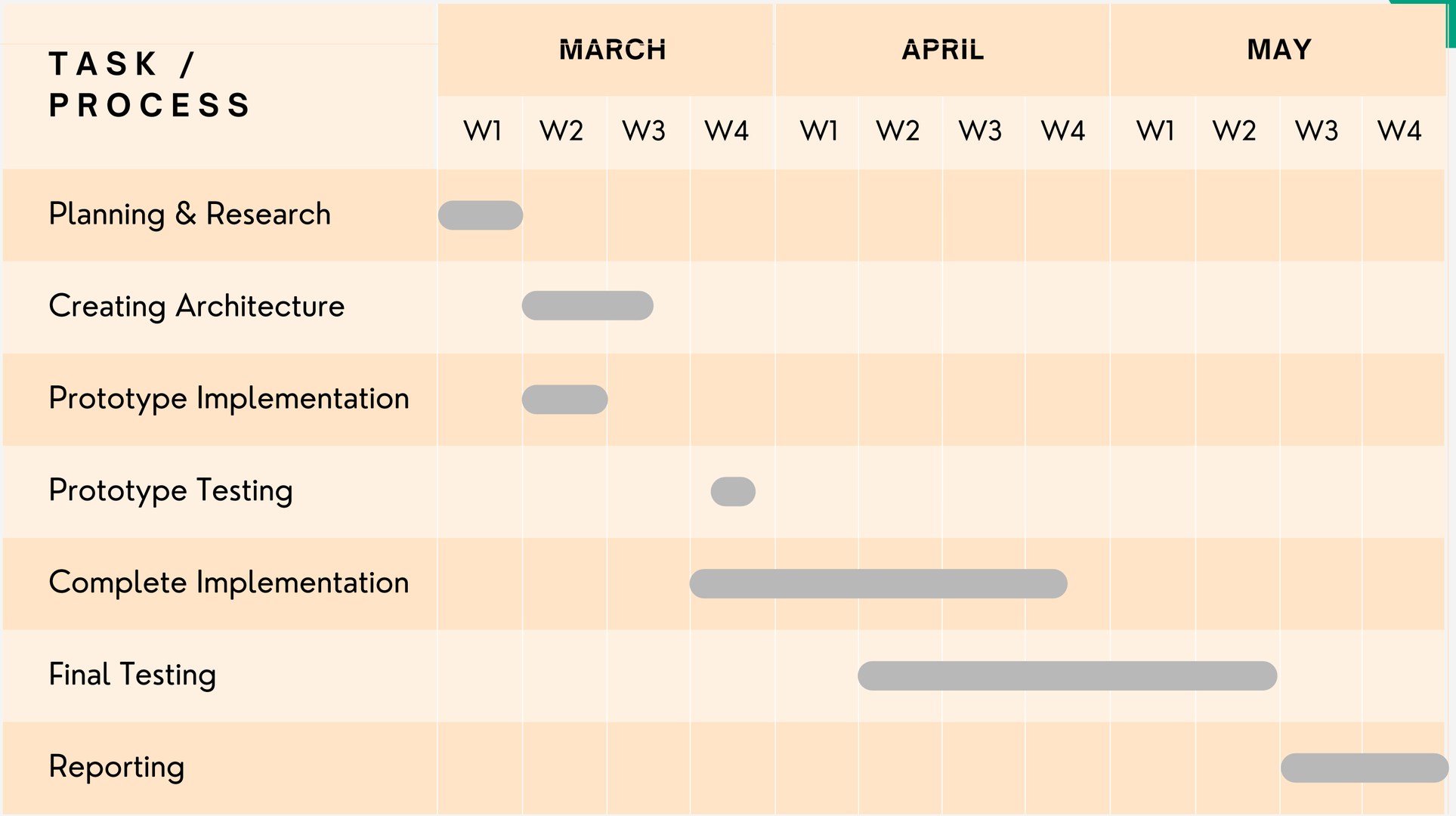


Figure 2: The Proposed Framework

Scope of Work

Limitations	Constraints
The system is decentralized in nature hence there is a extra computing load	The file size limit for document upload is 2MB
Restrictions on ACL's change manually	

Timeline of Project



References

Document Verification using Blockchain for Trusted CV Information
https://drive.google.com/file/d/1o7009l8MuOPeHTq6Vei8LZuiceU6hUVJ/view?usp=sharing

Blockchain Based Framework for Educational Certificates Verification
https://drive.google.com/file/d/1h46TygYUv4sppuGC9bp_A435emjUxec_/view?usp=sharing

A Graduation Certificate Verification Model via Utilization of the Blockchain Technology
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Thank you!

Feel free to approach us if you have any questions.

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