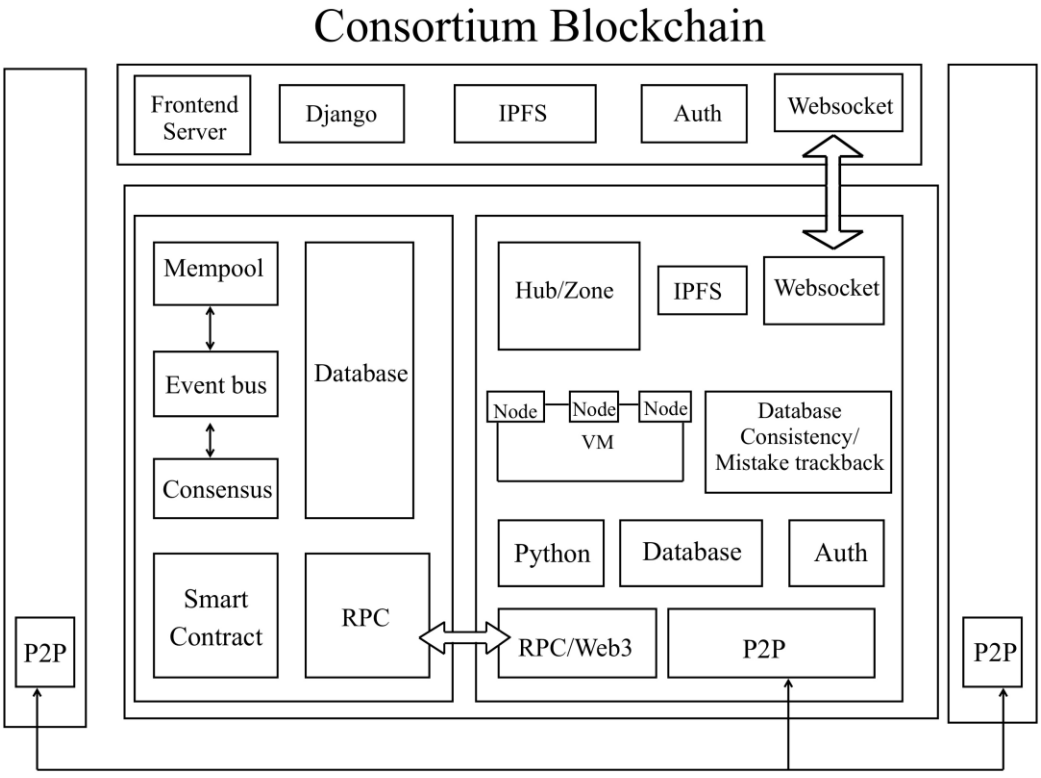
Project Design Phase-I

Solution Architecture

Date	23 November 2023
Team ID	930CE1C278945ABB71D48821C9E8B0F5
Project Name	Transparent education data management

Maximum Marks 4 Marks

solution Architecture Diagram: Our work is principally focused on designing an education information management system, harnessing the strengths of heterogeneous blockchain technology. This system enhances the safety, reliability, and efficiency of educational information storage, sharing, and modification processes. Moreover, it provides a more secure, efficient, and transparent method of displaying student information to potential recruiters and graduate schools. Our system leverages the online replication consistency check tool, pt-table-checksum, in tandem with a secondary consensus mechanism to ensure node consensus and facilitate error tracing.



Steps to complete the project

Step 1: Define Requirements

- Outline the specific features and functionalities your decentralized identity smart contract needs.
- Identify the types of information to be stored, access requirements, and any user interactions.

Step 2: Choose Standards

- Select Ethereum standards that fit your requirements, such as ERC-725 for identity management and ERC-735 for claim management.
- Understand the structure and functions these standards provide for decentralized identity.

Step 3: Smart Contract Logic

- Develop the core logic of your smart contract based on the chosen standards.
- Implement functions for creating identities, updating information, and verifying claims.
- Consider the flow of interactions within the contract and how different actions will be processed.