EXPERIMENT: 07

- **Project Title**: **Crowdfunding in Education Using Blockchain**

- **Aim:** To demonstrate the Work Design & Workflow analysis with reference to Scope Define in the industrial perspective.

- **Theory:**

Work Design:

Platform Development:

Designing and developing a blockchain-based crowdfunding platform tailored to the needs of educational fundraising in the industrial sector.

Incorporating features such as user authentication, project submission, crowdfunding campaigns, smart contract execution, and tokenization of educational assets.

Smart Contract Implementation:

Designing and implementing smart contracts to automate the execution of crowdfunding agreements.

Defining smart contract logic to handle fund allocation, release, and tokenization based on predefined conditions and project milestones.

Tokenization Strategy:

Developing a tokenization strategy to tokenize educational assets on the platform.

Defining token standards and protocols for representing ownership stakes in educational projects and facilitating trading of educational tokens.

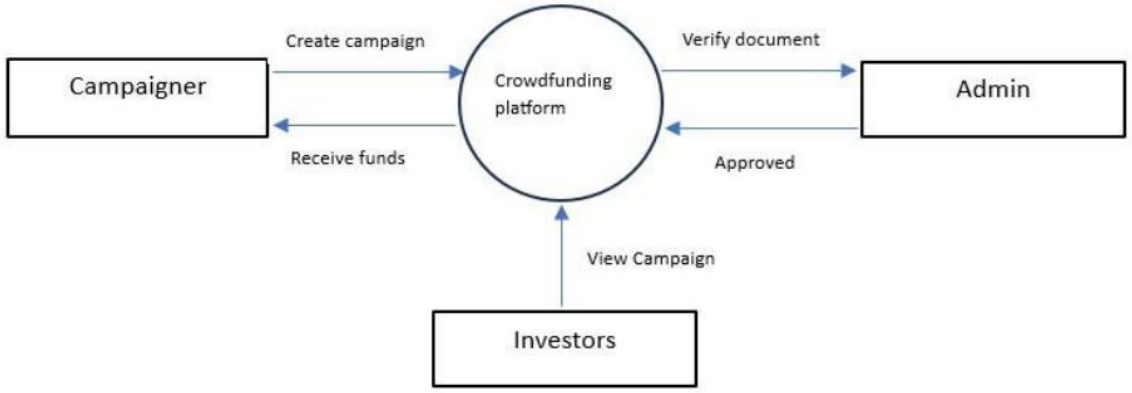

Figure 1. Process of crowdfunding

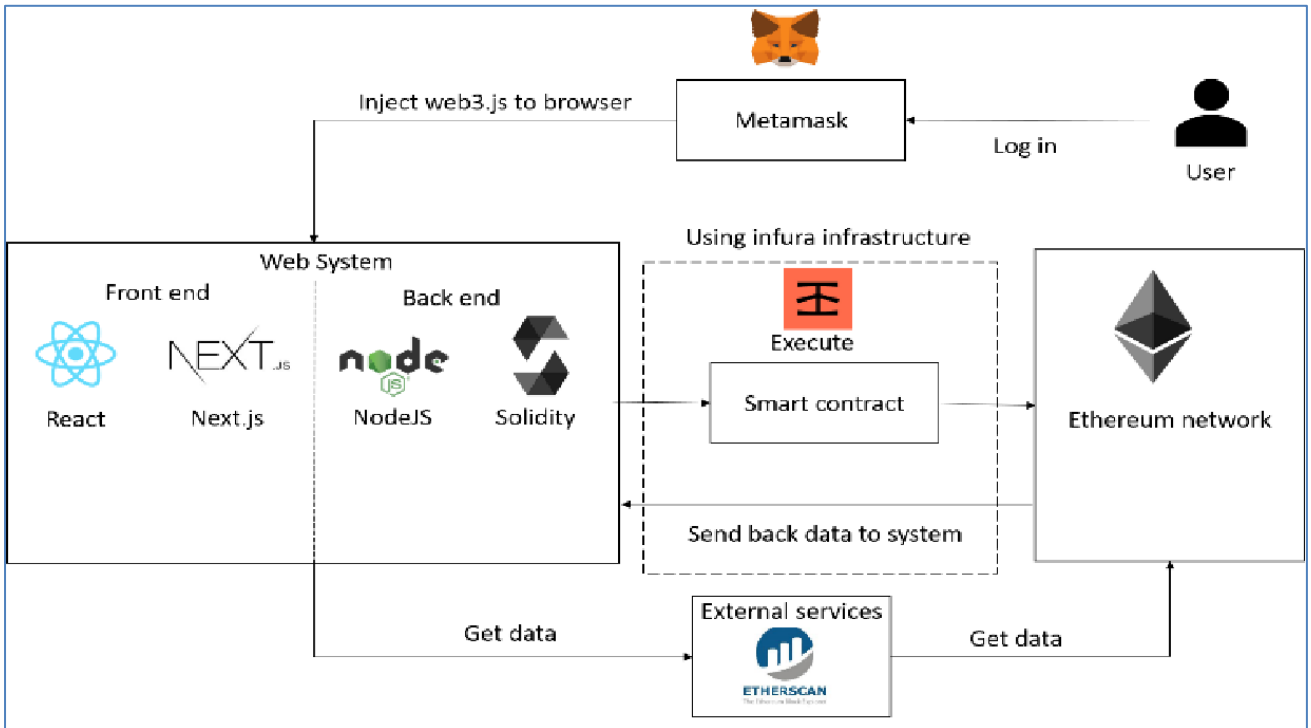

Figure 1. System architecture

Workflow Analysis:

User Registration & Verification:

Users register on the platform by providing necessary personal information and undergo verification processes to ensure regulatory compliance and enhance security.

Project Submission:

Educational institutions or students submit fundraising projects detailing their educational needs, funding goals, project timelines, and expected outcomes.

Crowdfunding Campaigns:

Approved projects are launched as crowdfunding campaigns on the platform, allowing donors to contribute funds using cryptocurrencies or fiat currencies.

Smart Contract Execution:

Smart contracts are triggered upon reaching fundraising goals or predefined milestones, automating the release of funds to project owners or educational institutions.

Tokenization and Trading:

Educational assets are tokenized on the platform, allowing investors to trade tokens representing ownership stakes in educational projects.

Secondary markets for trading educational tokens are facilitated, providing liquidity and investment opportunities for token holders.

Reference to Scope Definition:

The defined scope addresses financial barriers, inefficiencies in funding systems, lack of trust in fundraising, high fees, and interoperability challenges in educational crowdfunding within the industrial sector.

Work design focuses on developing a blockchain-based crowdfunding platform with features such as smart contracts and tokenization to address these challenges and enhance transparency, accessibility, and efficiency in educational fundraising.

Workflow analysis outlines the sequential steps involved in the crowdfunding process, from user registration to project submission, crowdfunding campaigns, smart contract execution, and tokenization/trading of educational assets.

Conclusion: -

Hence Successfully studied the Work Design & Workflow analysis with reference to Scope Define in the industrial perspective.