PES UNIVERSITY

Department of Computer Science & Engineering

UE17CS355 – Web Tech II Laboratory

Project Evaluation

Project Title : Voting system using Blockchain

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Project Description

- All-rounded polling application.
- Uses blockchain to validate the user and check for discrepancies.
- Can monitor polling in real-time.

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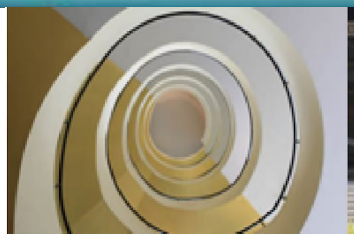
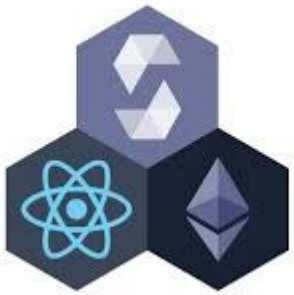





Technologies Used

- **FRONTEND:** ReactJS
- **BACKEND:** Flask, Web3.py
- **INTELLIGENT FUNCTIONALITIES:** Solidity, Ganache



Techniques Implemented

The 2 techniques implemented here are:

- Rest API
  - Values to Vote
  - Cast Votes
  - Update Votes
- Periodic Refresh
  - Used to update votes every 30 seconds or on refresh

Intelligent Functionality

- Blockchain has smart contracts(a piece of program)
    - Smart contracts are used to verify credentials
    - Smart contracts are typically written on a language called Solidity.
- Interact with smart contracts on blockchain using web3.py
- To deploy and interact with the blockchain, one has to pay cryptocurrency.

Advantages

- Highly secure and reliable
- Transparency
- No central authority

Disadvantages

- Scalability
- Difficult to fix bugs and make updates

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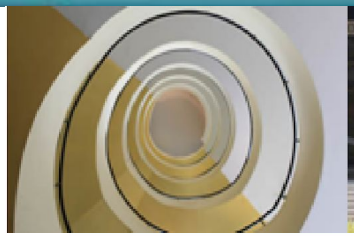

Thank You