Project Design Phase-I

Solution Architecture

Date	29 october 2023
Team ID	NM2023TMID03930
Project Name	Biometric security system for voting platform
Maximum Marks	4 Marks

Solution Architecture:
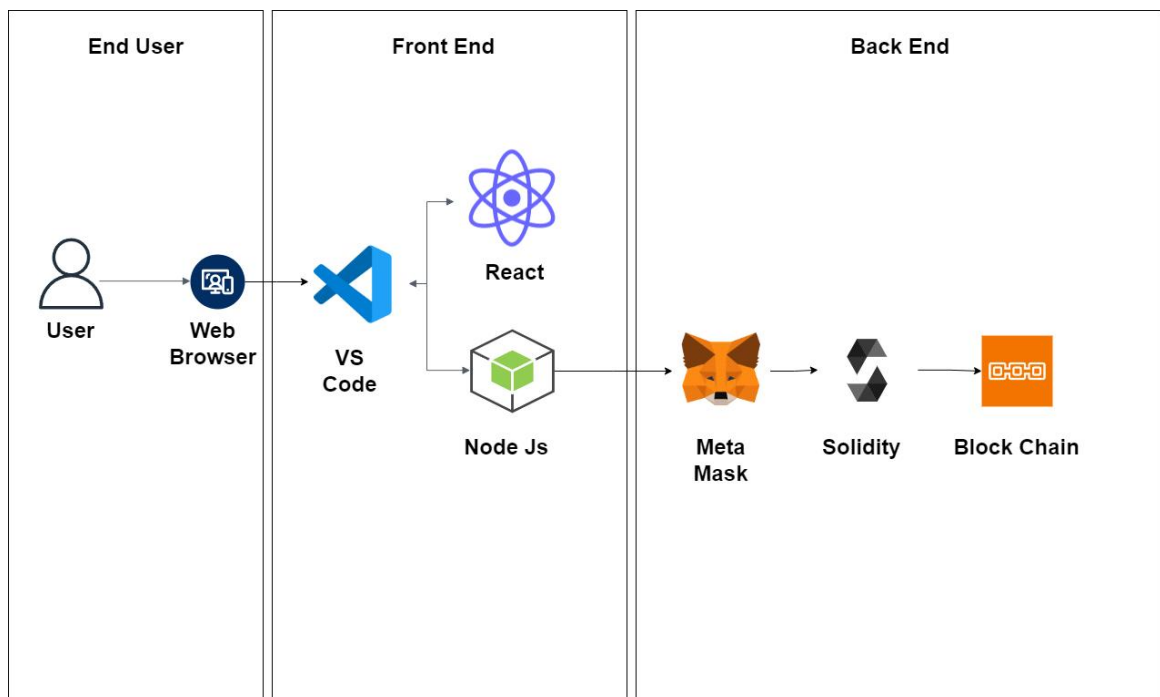
Solution architecture Description:

Front End (Voter Interface)

- Biometric scanner (fingerprint, facial recognition, etc.) to verify voter identity
- Touchscreen display for voter to make selections
- Printer to print paper ballot with voter selections
- Accessible interface for voters with disabilities

Back End (Election Management System)

- Biometric verification integration with voter registration databases
- Ballot creation and tallying application
- Voter selection storage and tabulation
- Audit trail creation
- Cybersecurity protections against hacking and data breaches

End User Experience

- Voters verify identity via biometric scan before voting
- Intuitive touchscreen interface to make ballot selections
- Paper ballot printed for voter verification and tabulation backup
- Accessibility options built in for voters with disabilities
- Quick and user-friendly experience while maintaining security

Key Components

- Biometric scanners, touchscreen displays, ballot printers at voting locations
- Secure networks and servers
- Voter registration and identity databases
- Ballot counting and tabulation software
- Cybersecurity monitoring and encryption
- Accessible interfaces and options