**Project Design Phase-I Solution Architecture**

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| Date | 19 September 2022 |
| Team ID | NM2023TMID03969 |
| 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