# DETERMINE THE REQUIREMENT

## (CUSTOMER JOURNEY MAPS )

| DATE | 04 NOVEMBER 2023 |
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| TEAM ID | NM2023TMIDO2213 |
| PROJECT NAME | BIOMETRIC SECURITY SYSTEM FOR VOTING PLATFORM |
| MAXIMUM MARK | 4 MARKS |

## Requirements:

1. **User Authentication:**
   - Biometric authentication methods (e.g., fingerprint, facial recognition, iris scan) must be available.
   - Multi-factor authentication for added security (biometric + password).
2. **Voter Registration:**
   - Allow voters to register with their biometric data.
   - Verify the identity of voters during registration.
3. **Voting Process:**
   - Ensure the biometric data is securely stored and transmitted.
   - Verify the voter's identity at the polling station using biometrics.
   - Provide a secure and tamper-proof electronic ballot.
4. **Accessibility:**
   - Ensure accessibility for individuals with disabilities.
   - Accommodate voters who may not be able to use biometric authentication.
5. **Security:**
   - Implement robust encryption and data protection measures.
   - Protect against fraud and impersonation.
   - Regularly update and patch the system to prevent vulnerabilities.
6. **Privacy:**
   - Ensure that voter biometric data is protected and not shared.
   - Comply with data privacy regulations and obtain voter consent.
7. **Scalability:**
   - Handle a large number of voters during peak election times.
   - Be able to scale the system as needed.

8. **Auditability:**
   - Keep detailed records of votes and voter interactions.
   - Enable auditing for transparency and accountability.
9. **User Education:**
   - Provide clear instructions to voters on how to use the biometric system.
   - Offer assistance to those who may be unfamiliar with the technology.

# Customer Journey Map:

1. **Awareness:**
   - Voter becomes aware of the biometric voting platform through official communication channels or election authorities.
2. **Registration:**
   - Voter enrolls in the system by providing their biometric data (e.g., fingerprint, facial image) and personal information.
3. **Authentication:**
   - On election day, the voter approaches the polling station or logs into the online platform.
   - The biometric system verifies the voter's identity using their registered biometric data.
4. **Voting:**
   - After successful authentication, the voter casts their vote through a secure interface.
   - The vote is encrypted and recorded in the system.
5. **Confirmation:**
   - The system provides a confirmation to the voter, ensuring that their vote has been counted.
6. **Results:**
   - After the election, the results are published, and the voter can verify that their vote has been included.
7. **Feedback and Support:**
   - Voters can provide feedback or seek support if they encounter any issues with the system.
8. **Security and Data Protection:**
   - The system continuously monitors for any security threats or data breaches and takes appropriate action.
9. **Post-election:**
   - The system securely stores biometric data and voting records for auditing purposes.

10. **Election authorities and administrators:**
    - They have access to the system for monitoring and managing the election process.

Creating a customer journey map helps in visualizing the voter's experience and identifies potential pain points that need to be addressed. It's essential to continuously improve and refine the system based on feedback and emerging security threats to ensure the integrity of the voting process.