Presentation by
Group I

DIGITIZING DEMOCRACY:

A VOTING SYSTEM PROJECT

SUPERVISOR: Engr. KOUGANG Guy Rostand

TABLE OF CONTENT

PROJECT OBJECTIVES

- **Digitizing the voting process**
- **Impartial vote counting**
- **Automation of large-scale data processing**

SYSTEM ARCHITECTURE

1. Implemented in Java

2. Utilizes ArrayLists and HashMaps for efficient data management

3. Key classes: Candidate, Voter, VotingSystem, main class

FUNCTIONALITY

Admin and voter roles

Admin initiates voting sessions, posts results, and manages the system

Voters enter names, cast votes, or exit

Robust tie-breaking mechanism for resolving ties

SECURITY MEASURES

Password-protected critical functions

User authentication through user IDs

Prevention of multiple votes by voters

DATA MANAGEMENT

Candidate and party information stored in a file

Automatic removal of duplicate party entries

Efficient File I/O manipulation for storage and retrieval

FUTURE ENHANCEMENTS

1. User interface for enhanced user-friendliness
2. Implementation of a database for managing predefined users
3. Restriction of system access to specific groups or countries

CHALLENGES FACED

1. **Initial difficulties with HashMaps and ArrayLists**

2. **Overcoming the learning curve through research and iteration**

CONCLUSION

THANKS FOR YOUR KEEN ATTENTION