CS 744: Design and Engineering of Computing Systems

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PROJECT REPORT on ONLINE VOTING SYSTEM over TCP PROTOCOL

(Phase 1)

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ABSTRACT

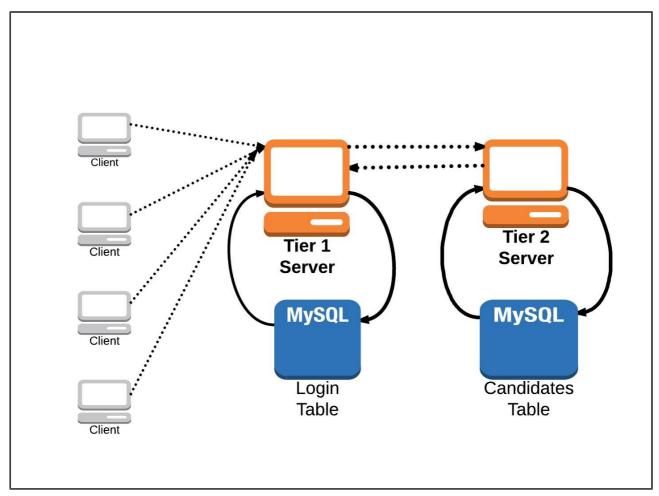
In India or any other developing country Voting is mostly done offline through either some Ballet Papers or some Electronic Voting Machine. Voting Offline is one of the reason Why Voting Percentage is low.

So We have come up with a Voting System which will take votes online. Voters can Vote from their home. And those votes are registered on our servers. Also our system ensures that one voter can vote only one time.

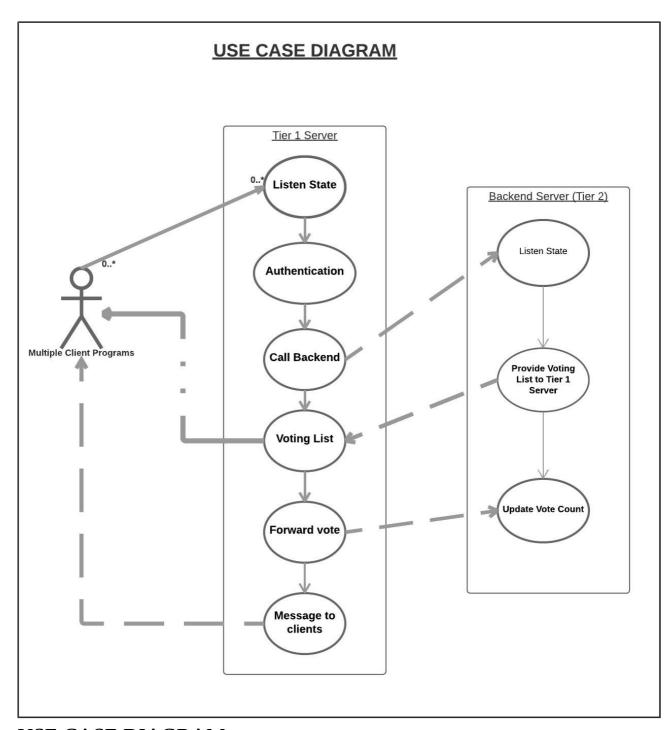
We haven't considered the online Security features in this system, Our main focus is on building a bare client server architecure, which communicates with each other through requests and responses.

ARCHITECTURE

- We have bulid a 3 tier client-server architecture.
- A Client sends his/her Aadhar ID as a Unique Identification (Request).
- Client sends the request to Authentication server(tier-1) and then tier-1 server after Authenticating the client passes the request to backend server(tier-2).
- Backend server on getting request fetches the list of candidates of that region to which the client belongs.
- This list is send to the Authentication server, it then forwards this list to client.
- Client on getting the list is asked to vote for one of the candidates present in the list.
- Client's response is recorded and is sent back to authentication server, which verifies if everything is fine.
- That request is again passed to the backend server for registering the vote in the database.
- And an Acknowledgement message is sent back to client via the Tier-1 server.
- Multiprocessing system



Logical Architecture Diagram



USE CASE DIAGRAM