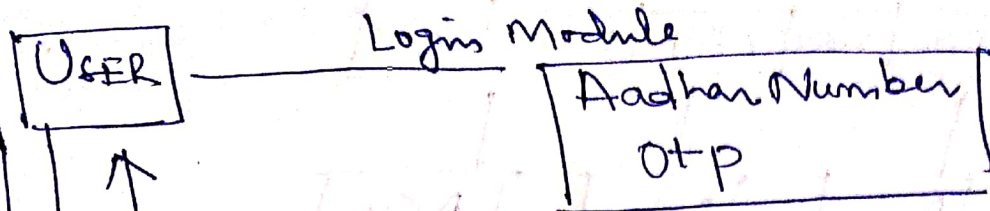# Voting System

1. ## USE CASES :-
   1. USER Login using Aadhar Number + OTP
   2. Party List
   3. User Anonymous Vote, unique, once, ban of 24 hours
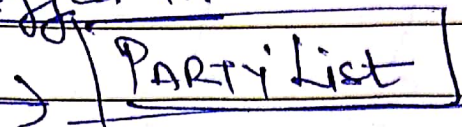   4. 100% Availability

CONSTRAINTS :-
1. Population per state wise
   100 (K) population
   28 States ——→ 28 × 100 (K)
2. Votes reach at X number
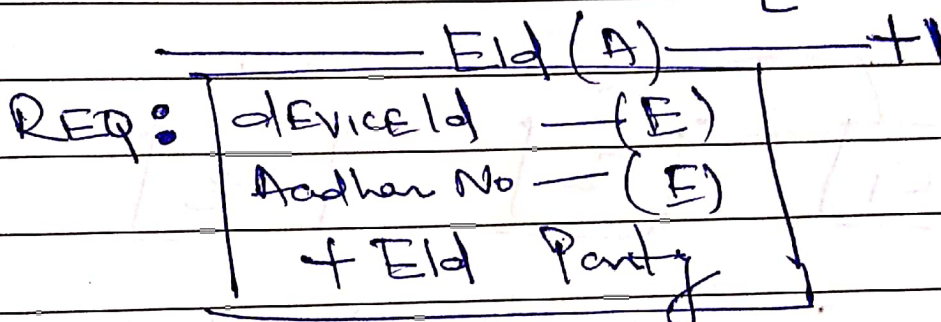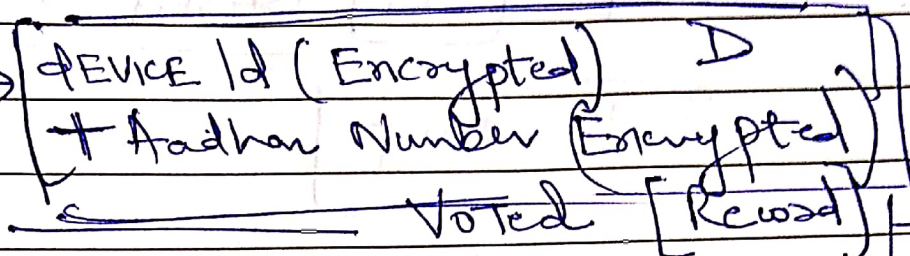   Shut the window

High Level design :-

1. No database
2. Aerospike Cluster per state
3. User Login System
   Aadhar Number + OTP [Assumption]
   Some API
4. Party List from Aerospike
5. Encrypted Id of Voting Party
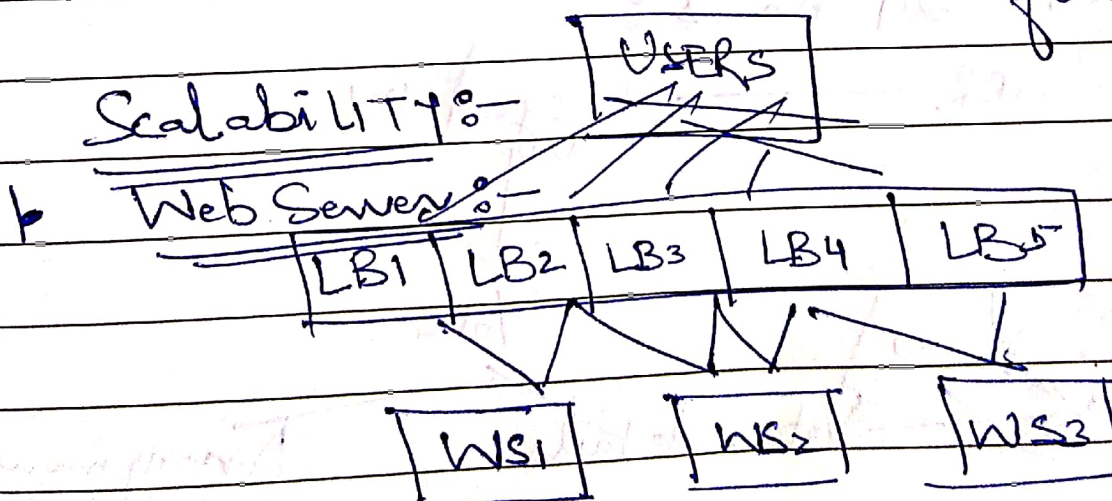6. Update against each party by +1
   Aerospike + total votes so far

Login Module

USER

Aadhar Number
Otp

≡ Integration
g gaand API
INDIA'S FAVORITE MUSIC APP

User Logged IN

PARTY List

A —— Id—Eld
B —— Id—Eld
C —— Id—Eld
D

dEVICE Id (Encrypted)
+ Aadhar Number (Encrypted)

Voted   [Reward]

———— Eld (A) ———— +1

REQ:
dEVICE Id —— (E)
Aadhar No —— (E)
+ Eld   Party

Total count So
far voted

USERS

Scalability:-

Web Server:-

| LB1 | LB2 | LB3 | LB4 | LB5 |

WS1   WS2   WS3

2.

| WS1 | WS2 | WS3 | WS4 | WS5 | WS6 |

| AC1 | AC2 | AC3 | AC4 |

State1   S2   S3   S4
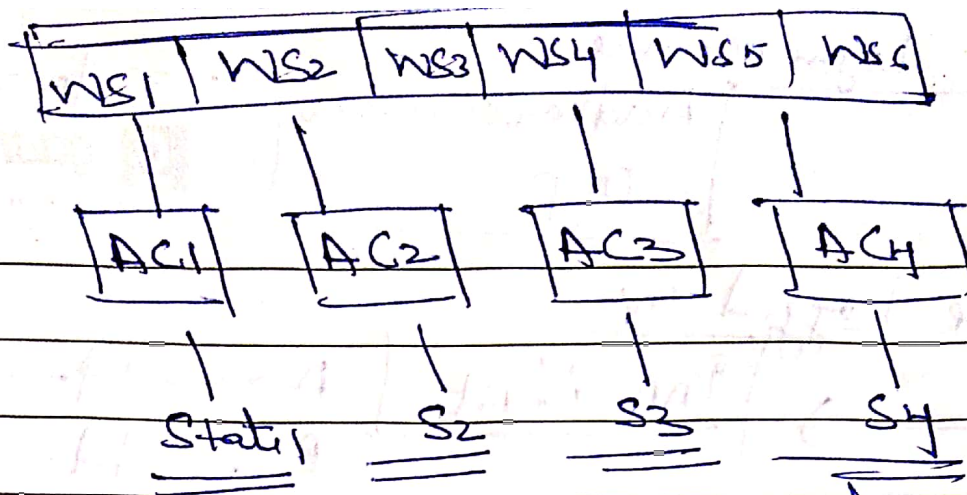
KEY ← SET BASED ON State

IF NOT

| C1 | C2 | C3 |
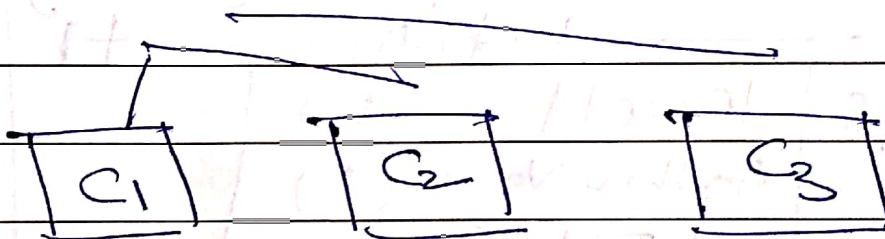
Geography Based Cluster

3. WINDOW 24 hours :-

User ———— Logged IN

            ↓

          Vote

Reach (30 's)
Close Window   Voter details   Anonymous
                                            Update
                                            to party