

# Management and Location of Booths using Android Technique

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**Abstract:** This is an Android based application about the Management & Location of the Voting Booth. "Booth Locator" is an Android Application. Through this application user could find the location of voting booths and check the party member will be standing on that particular area. Using "Voter ID Number" user could check their names present in the list or not. If their names are not present in the list then purposed app will show the shortest path from user's current location to its Voting Booth, where the names of the users are listed. User "Voting ID Number" will show all the information about the users and their Voting Booths. Through this application, Party President could check all the details of their party members and party members could view all their own details. In this app we have used 'Database' to store all the required details and 'Google Map' to represent shortest path.

**Keywords:** android application, booth station's location, management of voters, voter lists using database.

## 1. Introduction

This paper contains basically a booth location and management android application. By this we are presenting the one-stop solution for entire booth related analysis. "BOOTH LOCATOR" is a comprehensive one-stop solution of leading political parties to manage their constituency information in convenient manner. This election application comprises all the relevant information of a particular constituency that every political party needs to make their way to success.

This Application contains 7 Modules:

- Location finder
- Login
- Sign up
- Booth Members
- Booth Location
- Party team Members
- Election Team Members

## 2. Materials and methods

### A. Indian Voter's list

This list contains state wise voter lists of India. No more hassle of going to the booth with proof of identity or other documents and searching your name in the list. You can at once authenticate your claim to be the voter in your locality and

cooperate to do the vote casting peacefully with the organized democratic approach. Not only will you, almost all Indian voters find this electoral app extremely useful for its utility features.

### B. How the app works

The decomposition shows the existence of the following subsystems:

1. User management subsystem
2. Account management subsystem
3. Transaction management subsystem
4. Storage subsystem
5. Database subsystem

#### 1) User management subsystem

This subsystem manages the different users of the system by taking care of login information of them. It also manages the username and passwords of all users of the system for security purpose.

Operations provided by this subsystem are:

- Create login ()
- Update login ()
- Edit data ()
- Login ()

#### 2) Account management subsystem

This subsystem managing the user accounts. It provides function for opening, updating and closing an account. This subsystem uses login services of the user management subsystem for authenticating the administrator and also uses the storage subsystem for storing account's information.

The operations provided by this subsystem are:

- Login ()
- Change password ()
- Create account ()
- Update account ()
- Create/delete/update questions ()
- Close account ()

#### 3) Transaction management subsystem

This subsystem is responsible for managing the transactions. It provides all functions for managing variety of transactions like exam details, questions, answers, manage user's registration, result generations and any other things. Actors of

this subsystem are admin.

Operations performed by this subsystem are:

- Create questions ()
- Edit questions ()
- Delete questions ()
- Generate result ()
- Change password ()

4) *The storage subsystem*

This system will encapsulate the database providing a common interface to other three high level subsystems. It is responsible for getting system-related data from different subsystems and issuing DBMS-specific calls for information storage and retrieval.

5) *The database subsystem*

This system will be implemented by relational database management system used to store the persistent data.

Database Design: The overall design of the development of database technology has been to treat the data as an organizational resource.

The list of tables:

1. User Info
2. Booth Location
3. Booth Member Info
4. Party Member Info
5. Election team Member Info
6. Voter's Details

Table 1  
User Info

Field Name	Data Type	Description
Id	Integer	Not null, Auto Incremented
Name	Varchar	Not null
Username	Varchar	Not Null
Password	Varchar	Not Null
State	Varchar	Not Null
District	Varchar	Not Null
Party Name	Varchar	Not Null

Table 2  
Booth Member Info

Field Name	Data Type	Description
Id	Integer	Not null
Vidhan Name	Varchar	Not null
Mandal	Varchar	Not Null
Sector	Varchar	Not Null
Name	Varchar	Not Null
Phone Number	Varchar	Not Null
Voter Id	Varchar	Not Null
Email ID	Varchar	Not Null
Designation	Varchar	Not Null
Address	Varchar	Not Null
Booth Location	Varchar	Not Null
Username	Varchar	Not Null
Party Name	Varchar	Not Null

Table 3  
Booth Location Info

Field Name	Data Type	Description
Id	Integer	Not null, Auto Incremented
Vidhan Name	Varchar	Not null
Mandal	Varchar	Not Null
Sector	Varchar	Not Null
Booth Address	Varchar	Not Null
Longitude	Varchar	Not Null
Latitude	Varchar	Not Null
Username	Varchar	Not Null

Table 4  
Party Member Info

Field Name	Data Type	Description
Id	Integer	Not null, Auto Incremented
Name	Varchar	Not null
Phone Number	Varchar	Not Null
Voter Id	Varchar	Not Null
Email Id	Varchar	Not Null
Designation	Varchar	Not Null
Address	Varchar	Not Null
Username	Varchar	Not Null
Member Password	Varchar	Not Null

Table 5  
Election Team Member Info

Field Name	Data Type	Description
Id	Integer	Not null, Auto Incremented
Name	Varchar	Not null
Phone Number	Varchar	Not Null
Voter Id	Varchar	Not Null
Email Id	Varchar	Not Null
Designation	Varchar	Not Null
Address	Varchar	Not Null
Username	Varchar	Not Null
Member Password	Varchar	Not Null

Table 6  
Voter's Details

Field Name	Data Type	Description
Id	Integer	Not null, Auto Incremented
Voter_id	Varchar	Not null
Name	Varchar	Not Null
Father Name	Varchar	Not Null
Gender	Varchar	Not Null
Date of Birth	Varchar	Not Null
Voter Address	Varchar	Not Null
Polling Station	Varchar	Not Null

### 3. Proposed algorithm

- Step 1: Select Party Member or Party President
- Step 2: Registration or Signup
- Step 3: Login with Valid Username and password
- Step 4: Home page and Select the choice
  1. Booth Members
  2. Party Members
  3. Election Team Members
  4. Booth Locations

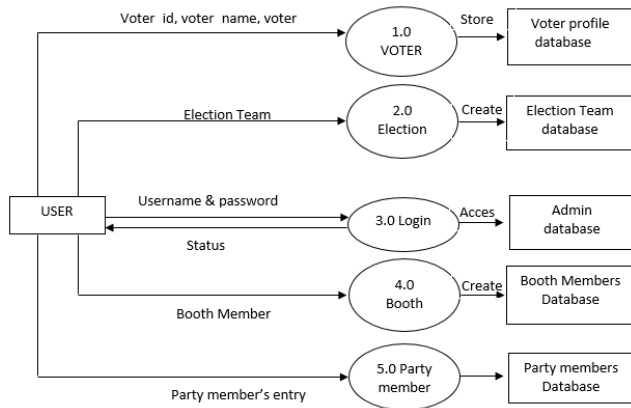


Fig. 1. Data flow diagram of purposed application

#### 4. Result and discussion

In our study, we made an android platform based app “Booth Management & Locator”, which has the ability to find the location of current location to the polling station and show the shortest path. We also manage the questions in MySQL database through approve and delete button in our android app, that is authorization part of questions through android app.

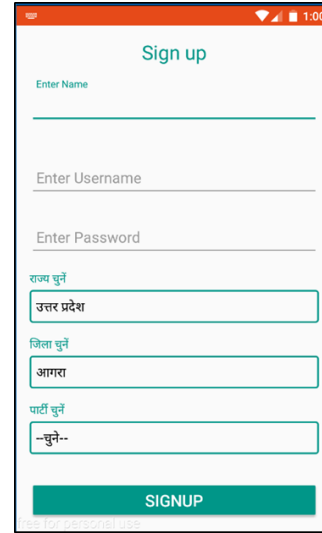


Fig. 4. Party sign up

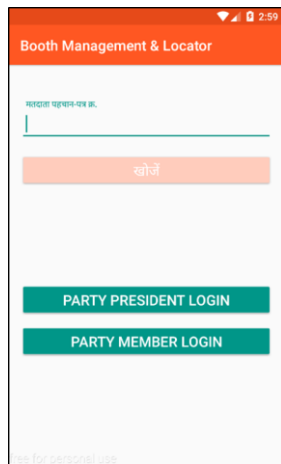


Fig. 2. Voter screen



Fig. 5. Home Screen

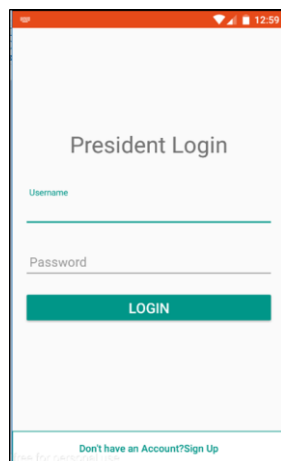


Fig. 3. President login

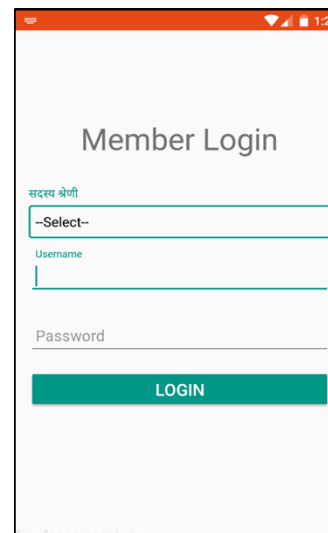


Fig. 6. Member Login



Fig. 7. View Member

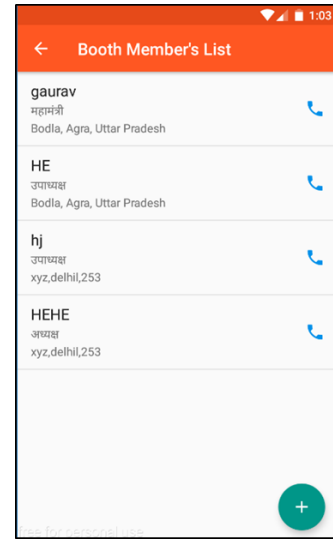


Fig. 10. Booth Member List

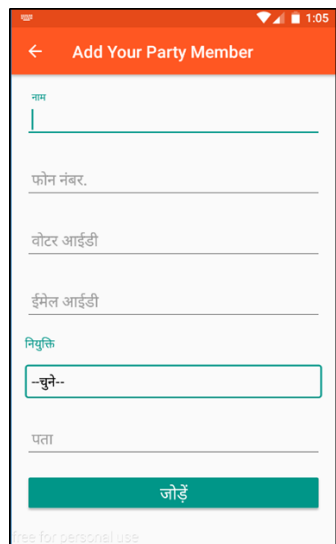


Fig. 8. Add Party Members

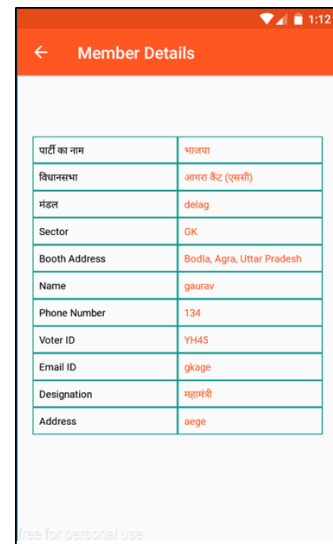


Fig. 11. Booth Member Details

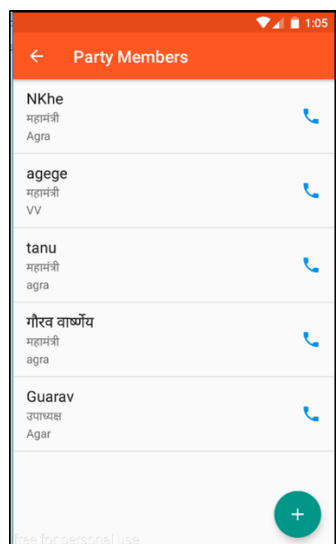


Fig. 9. Party Member Details

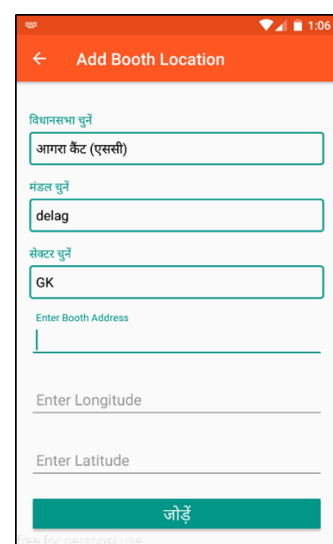


Fig. 12. Add Booth Location

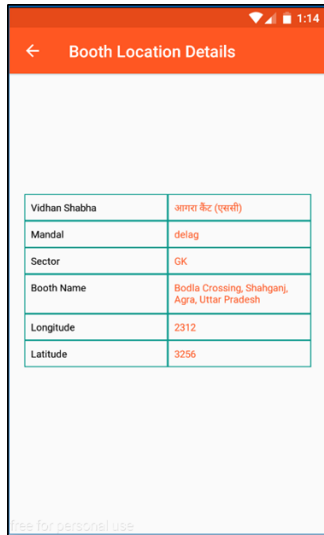


Fig. 13. Booth Details

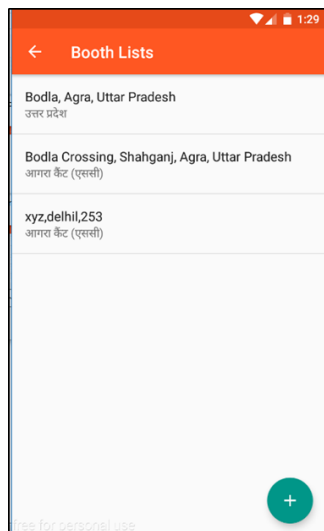


Fig. 14. Booth Lists

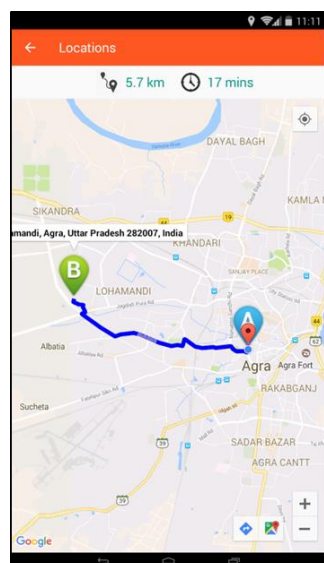


Fig. 15. Location Finder

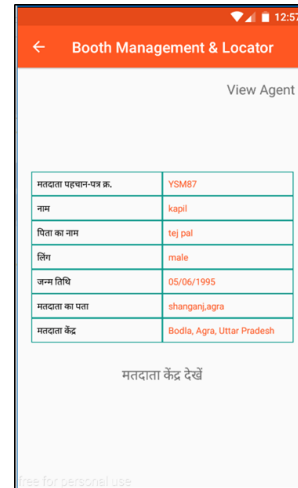


Fig. 16. Voters Details

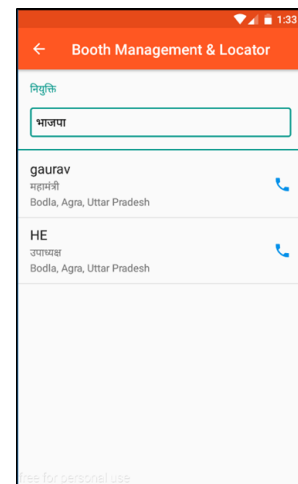


Fig. 17. Party Agent

In future context, we want to add some interesting things into “Booth Management & Locator” which will be more improved as compared to current version it will conduct directly instead of its offline version and whole project will run online rather than run on local host.

## 5. Conclusion

At the end, we find that, the applications are really useful. The tracker unlike others is free of cost. The network connection module developed would be helpful in N number of scenarios where synchronization or data exchange between devices is desired. The pin point module helps us in locating users and at the same time differentiating between custom locations, home location & Polling’ locations. It’s is very useful in storing the information of Election Parties and will reduce the paper work. All Member of that Election Party can have all the same information of each other’s. In this research, the various technologies which have been used to manage & develop the applications have been discussed. Support for both local host and remote server has been discussed. They are instrumental in making the applications stand up to their quality

while seamlessly implementing the work flow.

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