Term Project

Vote Application for iOS

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Abstract

During the past century, most of nations on this planet has entered the new era of democracy. As a result, people in these countries have rights to choose their preferred government by voting for themselves. Nowadays the spirit of the democracy seeps from everyone's pore. People desire equality no matter where they are, what they do. People want to vote for what plan should be chosen in their business group. People also hope to vote for what communal facilities they should own in their community. People with a big family even need to vote for where to go in the vacation. If we take traditionary ways to solve these problems, it will take plenty of time and effort to collect every paper vote and to do statistic for a result. And we cannot make sure it's totally anonymous because of the unique handwriting. Now we can simplify all these intricate procedures by using this vote application.

This application can be used in many occasions such as meeting, classroom, party and so on so forth. Anyone could start a vote in this application. Then the vote event will be created with a password with which people are eligible to vote. Every people around this particular site can find this vote event on his or her application. If it doesn't work, this vote event can also be searched by its unique ID. Every participant's name will be showed in the application. And of course, the detailed choices of everyone will not be showed. The result will be pushed to everyone's application simultaneously after the last voter made his or her decision.

The whole project will use C/S architecture, a user can start a vote, then the client app will send the location(if avaliable) and vote information to the server, users also can set a password for this vote. Server will open a new vote and send back a unique ID to client. After that other app client can search this vote by ID or the location infomation to join this vote, after the vote finish, the server will push the vote result to all clients which joined the vote by notification or can check the vote result by ID.

We will use iOS SDK to implement client-side application, which will involve the MapKit, CoreLocation, UIKit, and other general Cocoa framework. And we'll use Google Analytics to trace the application's quality and get user's preferences.

Server side will use *Plankton Server* framework, which designs for the iOS platform and integrates useful features for iOS platform such as notification push, request package encapsulation & encrypt and so on. This framework will works on Linux and uses MySQL as database. The information in network package will encode as JSON format.

As a result, we plan to implement these features for client as below. We want to keep our app's function as pure as possible, so we will only focus on vote relate feature.

- Start a vote
  1.Vote can be public or private; a public vote can start as anonymous.
  2.Vote can be permanent or timed.

- Search a vote
  1.Search vote can use current location and vote's unique ID.

- Join a vote
  1.Join a vote by password (private) or anonymous vote for a public vote around you.

- Check a vote's result.
  1. If user accepts a notification, they will be notifying after the vote finish (timed).
  2. If the vote is permanent type the user can check the result after vote.