

App to Explore The City: Survey Result, Technical Demonstration and Product Display

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Introduction

When we first travel to a city, we usually choose to visit those famous tourist attractions. In fact, these attractions are only a small part of the city, and there are many other interesting places that many people have ignored, especially those with historical or cultural significance. For example, places where historical changes have taken place, places where celebrities have visited and so on. Our purpose is to design an app that can recommend this kind of city components to users and help people discover the beauty of the city.



Fieldwork

We designed a questionnaire to investigate some core issues of our project. The questions can be divided into three parts: 1. User's expectation for this app. 2. User's understanding of urban culture. 3. Privacy protection issue.

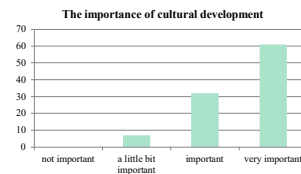
We went to a shopping mall to conduct the fieldwork. There are many people there of all ages, so we can interview a lot of people.



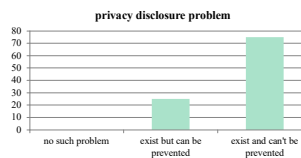
Survey Result

- The information that users hope to obtain
 - folk street/district
 - historical site
 - entertainment attractions
 - museum
 - city landmark

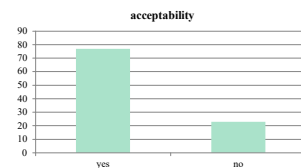
- The importance of cultural development



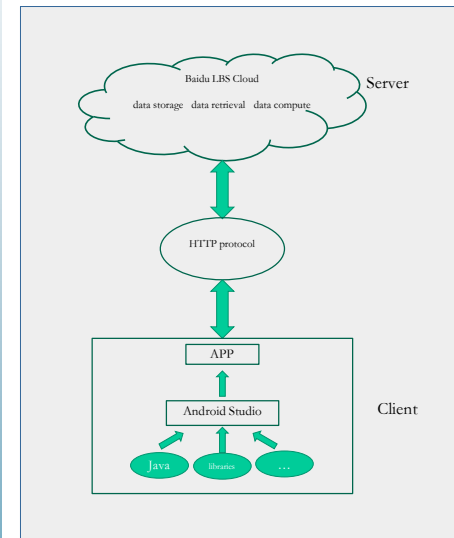
- Privacy disclosure problem



- The app needs to get users' real time location, accept or not?



Technical Demonstration



System Architecture

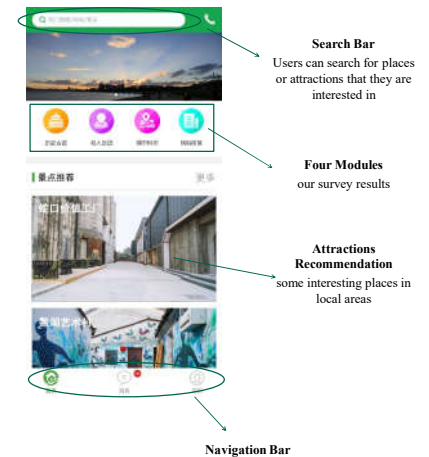
Feasibility Analysis

- Server
- Baidu LBS Cloud service provides developers with functions of data storage, data display and data retrieval
 - Save the cost of building servers
 - The learning cost is relatively low

- Client
- Use Android Studio as the development tool
 - Based on Java
 - The development process includes the use of some Android open source libraries and controls

System Components

Product Display



This is a conceived interface of our app. The UI design follows the general principles of Android application design.

References

- Steenstra J, Gantman A, Taylor K, et al. Location based service (LBS) system and method for targeted advertising: U.S. Patent Application 10/931,309[P]. 2006-3-23.
- Junglas I A, Watson R T. Location-based services[J]. Communications of the ACM, 2008, 51(3): 65.