

Development and Design of Investigation Platform Based on the Mobile Media

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ABSTRACT

Enterprise market research is mainly tend to the traditional paper investigation and telephone interview, The traditional survey method has wasted a lot of human material and financial resources, it also isn't beneficial to statistical analysis and survey efficiency is low, so it brings a lot of inconvenience to the enterprise. This paper designs survey platform for the industry based on the analysis of the present Internet survey situation and with the help of the existing network platform characteristic. This platform uses the Ajax and ASP. NET3.5 technology, it is suitable for online survey, voting, electing and testing. It reduces the burden of management and statistics work and improve the quality of the industry survey.

Keywords: Investigation Platform; Industry; Ajax; Mobile Phone

1. Introduction

With the increasing popularity of the computer network in people's daily life, it possible for the Internet a wide range of survey. Enterprise grasps the market channel information and user demand through the Internet survey, it not only save survey costs but also make a quick understanding of a thread information. But the survey also exist defects, if respondents are all from the internet users from computer platform, will cause the range of survey group too narrow and the results of the survey can't represent real situation. In the development tendency of mobile media and other multimedia terminal especially handset media as a representative, those network platforms based on compute are in the soup.[1] In order to solve these problems, the author designed a B/S structure, based on ASP asp.net technology development of general survey system. The system uses MySQL database, make full use of Ajax technology to improve the user experience feeling, and its intelligent data statistics, convenient operation, the support of cell phone users access, have greatly improving the initiative of user research, meet the demand of the market survey.

2. Present Situation of Internet Survey System

Nowadays there are a lot of network survey systems, take questionnaire star (www.soupm.com) as an example, it specially opened user registration, and user can use survey system to create, management or release question-

naire in back module after logged in, also use can distribute link of the questionnaire to respondents and get data in back module. In addition, some web portals also have investigation, voting and other activities; these surveys are aim at user's satisfaction, deliberate or discuss and elect the popularity on some recent hotspot events or activities. But few enterprise web sites has its own survey system, enterprise's investigation are still employ traditional research method. And the most current survey system is based on used in computer network and didn't expand to cell phones or other multimedia terminal services, so the current network survey system still has some limitations.[2]

3. Demand and Feasibility Analysis

3.1. Demand Analysis

With the popularization of the information network, most enterprises and units have advanced digital management and construction, enterprises and units have set up their own web site and automatic office system in succession. At the same time, websites of enterprises or units usually has a survey function or selection function; enterprises get market information and user demand through the Internet channel, and hope survey data and the competition can response the truth accurately. The premise of get more accurate results is the users' common participation in group. According to this thought, we need to expand the user group, arouse the enthusiasm of user's active to participate in the survey. The design of this system is

equipped with fast, intelligent and mobile phone access performance.

3.2. Feasibility Analysis

Based on the Ajax, the general survey platform contains the following few basic functions, issue questionnaires, management questionnaire, statistical survey data, leading-out Excel and printed, have functions of mobile phone access and page have no refresh function. Tell from the technical level, to realize the Mobile phone access, need to add Web Service interface, add Mobile Web Form page, and developing based on Mobile controls. But the terminal of this system contains computer network, mobile media and other multimedia terminal; the system must be simple and easy to operate, so this system adopt Ajax based on jQuery to improve the user's experience feeling.

4. System Design

4.1. Principle of System Design

General investigation platform based on the Ajax is designing aimed for enterprises or unit websites. It's just to help enterprises or units to make a quick, accurate understanding of market's or user's information and improve service quality, so this system have followed several principles such as practicability, adaptability and expansibility, safety and intelligent.[3]

4.2. Goal of System Design

General investigation platform based on the Ajax using the B/S structure, it can be operated through the browser, increase Web Service interface, provide interface for mobile phone access, user can visit website and couple back information of investigation at any time and place through mobile phones; administrator can also manage

questionnaire, check results at any time. Used jQuery Ajax form, choose concise and easy interface, operation have designed more humanist, improve users' feeling of experience, reduce burdens of server. It shows as **Figure 1**.

5. Development and Implementation of System

5.1. Choice of Development Tools

From side of technical and development costs of economic, system uses Microsoft's Visual Studio 2010 as development platform. Visual Studio is a complete development tools which used to create asp.net Web applications, XML Web services, desktop applications and mobile applications. Visual Basic, Visual C# and Visual C++ are all using the same integrated development environment (IDE), in this way can share tool, and can easily create mixed solutions of language. In addition, the language use the.net Framework function, it provides key technology of simplify the ASP Web applications and develop XML Web services. [4] The network operating system uses a Windows platform, so the system choice Microsoft IIS as Internet information service manager.

5.2. System Structure Model

In order to enhance the security of the system, make a convenient for software maintenance, improve easy extensibility of software needs, the system needs to make full use of object-oriented design, in view of the above consideration, industry survey platform based on Ajax using the "three layer architecture" design, and this design is exactly fit the software principle of "high aggregate, low coupling". Let's move to the "three layer architecture" model: Three-tier application usually means three layers framework is to divided the whole business

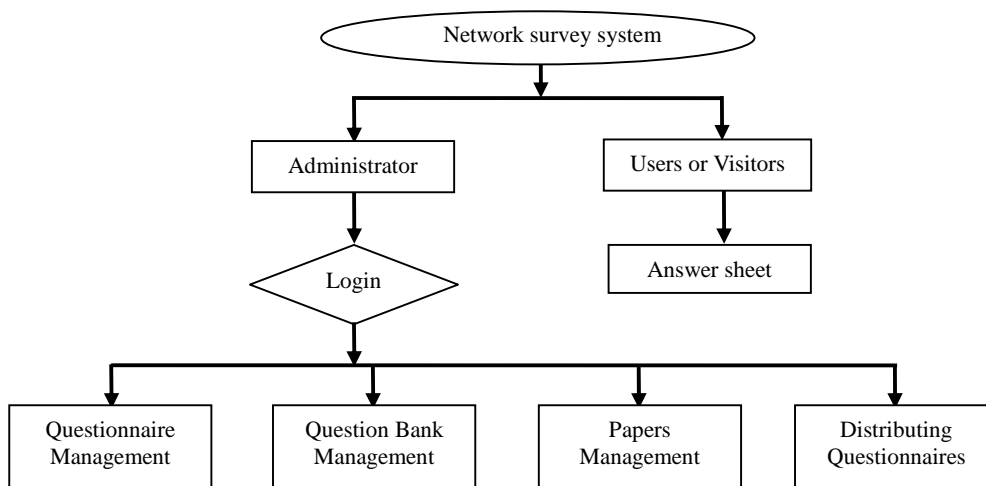


Figure 1. System structure graph.

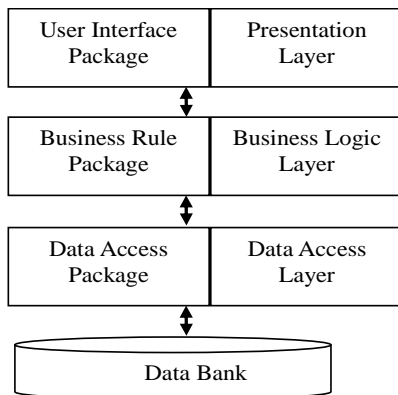


Figure 2. 3-tier application relation structure graph.

application into the presentation layer (UI), business logic layer (BLL) and data access layer (DAL). [5]The relationship structure is shown in **Figure 2**.

6. Conclusions

This article begins with the present situation of Internet survey and Internet survey system, understands the demand of general investigation platform based on Ajax, then analyzes the feasibility of the related system func-

tion and technology, chooses my SQL as database management, combined with Ajax and Web Service, and other key technology, designs investigation platform for the mobile media represented by mobile phones. But this article still needs to be perfected in practice of this research of this terminal multimedia.

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