Microprogram Design and Implementation of Academic Guidance WeChat

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Abstract

With the continuous spread of the Internet, education is also deeply affected, from computer-related courses to the current comprehensive network teaching, constantly promote a variety of learning methods, more beneficial to students to learn knowledge. This system based on the current Internet to form a new model of academic guidance platform for college students, to improve the quality of teaching and create a learning atmosphere will play an inestimable role. At present, the main way of the school's academic guidance is QQ group of questions and offline teachers to consult the situation. Both QQ groups and offline tutoring are not timely and effective.For students the problem can be solved most effectively in a multi-hour way.For volunteers, can quickly exercise and help students, for teachers more convenient to answer students' questions. The merger and development of small program mode shows a new round of explosive growth for the construction of a new team of pioneer representatives. Because of its low development cost, but strong operation technology, we should seize the opportunity, absorb high-tech talents, strive to enhance the strength of innovation and entrepreneurship, and strive to promote the linkage of traditional and Internet new economy.The research on the form of university students' academic guidance platform is in line with the characteristics and needs of modern college students' academic development.

Keywords

Academic guidance system, WeChat, WeChat Mini Program.

1.　Introduction

At present, in modern and diversified society, higher education is constantly reformed and perfected, dedicated to cultivating high-quality talents and forming an independent and active learning atmosphere in the era of real habits, and the educational methods of colleges and universities are gradually in the direction of innovation, power and diversification [1]. Now in order to carry out the way of network teaching in depth, it is more convenient for students to learn the way and stimulate the enthusiasm of students to learn, so as to develop the academic guidance system to provide a better solution to the problem of appeal, to create a better learning environment for our students, the current project is in the testing stage, will soon be released online.

2.　Current status of research

With the development of information, academic guidance platform began to step into the life of college students, which plays an inestimable role in improving the quality of students. According to the survey, college students' demand for academic guidance platform is becoming more and more intense, and they are waiting for the diversified development of the way to promote the of academic progress [2]. Furthermore, according to the different factors of specialty and individual status, grade and so on, the needs of the subject to be tutoring are different, and the needs of different students are different, so it is more and more important to teach students according to their aptitude.

2.1 Status of research abroad

The development of foreign network is earlier than that of domestic, and there is more reference in the development of academic guidance platform. However, because the national conditions of each country are not the same, there is still a big difference in the development of academic guidance platform. For example, in the United States, early years have been Google, Silicon Valley and other Internet rapid development of enterprises to drive the overall national computer industry level development [3].

To provide a supply of talent, universities encourage students to establish exclusive blog websites during school to enhance technical [4]. Driven by the school, many academic guidance platforms have been built to provide a comprehensive learning platform.

2.2 Status of domestic research

With the beginning of domestic colleges and universities "strict education ", into the era of reasonable burden for college students, academic guidance, this seemingly simple thing, now" demand "is increasing. Faced with this problem, many colleges and universities began to set up academic guidance organization according to the characteristics of college students [5]. On the one hand, college students in the study side, do not want to expose their plight in front of school teachers; on the other hand, these organizations, because it is difficult to attract college students and become furnishings.

The following are commonly used in the past:

2.2.1 Traditional Academic Guidance

Application of case analysis method, combined with peer teaching related knowledge, choose the appropriate peer teaching students, all-round help homework [6].

Class members of the curriculum from the following aspects:

(1) Joint formulation of term course learning plans

(2) Time management for college life

(3) Master learning methods and skills.

Professional training for senior members of the same profession from the following aspects:

(1) Establishment of professional preferences

(2) Transformation of learning concepts

(3) Enhancing confidence in learning.

2.2.2 Extracurricular Guidance

Enquiries show that more and more students participate in extracurricular tutoring in the world," tutoring fever "in our country has become a widespread phenomenon education [7]. But most people have different opinions about extracurricular tutoring, some people are extremely superstitious about extracurricular tutoring, others think that learning mainly depends on their own efforts, and the tutoring class has little to do with it. The rest is to follow the trend, with do not want to lose in the starting line mentality. The social response to extracurricular tutoring is also very fierce, think that its blindly seeking to advance the method seriously disrupted the normal development of classroom teaching. China's Minister of Education Chen Baosheng even issued "the Ministry of Education in the history of the strictest management of off-campus training" notice, almost make the advantages of extracurricular tutoring disappeared. As a result, this approach can not, or is not very certain to explain the advantages and disadvantages of extracurricular tutoring

3. Brief description of technology

This paper summarizes the theoretical and technical aspects of the project. Requirements, market research, analysis, etc. needed before implementing the Mini Programs. It also includes tools for simple small programs, some theoretical knowledge, some requirements for encapsulation, and some thinking and implementation of project sustainability.

3.1 Modularization

Modular development can improve code reuse rate and facilitate code management [8]. The current popular js modular specifications are CommonJS, AMD, CMD and ES6 modular systems.

3.2 Encapsulation of requests and API interface management

The operation of sending multiple requests is the same, and if you write multiple, there will be duplicate code. To avoid code redundancy, you can encapsulate http code into a function with the idea of a function, calling our encapsulated function to send http requests multiple times [9].

3.3 Maintainability

(1) Understandability: Others can take over the code and understand its intent without having to spend too much time explaining the [10].

(2) Intuitive: What is in the code can be understood at first glance, despite the complexity its operation [11].

(3) Adaptability: The code does not require a complete rewriting method with a change in data.

(4) Extensibility: Extensibility to core functions in the code architecture.

(5) Adjustability: When something goes wrong, the code gives you enough information to determine the problem directly.

3.4 Extensibility and ease of use

The front-end development work, especially in the initial stage of the project, often select the third party component library to build quickly, take Vue ecology, the public generally has a special love for element-ui and iview, among which element-ui are mostly used for docking front-end projects, iview are mostly used for docking background management project [12]. Whatever component libraries are used, as long as their ease of use, extensibility, and sense are strong enough, they usually bring us a good experience.

3.5 Automatic login

First time to enter, determine whether the openid exists, there is no save, the existence is the old user, automatic login.

4. Needs analysis

Mainly to the client and the background management system requirements analysis, so as to better prepare for the later development.

4.1 Background information

Build communication platform, create active learning atmosphere: in the diversified information society, the characters in teaching are not limited to teachers, and the communication and cooperation between students is also an important driving force for students to advance.

Different modules are set according to different needs: the needs of students in different majors are different, which requires the academic guidance platform to set up different functional modules to meet the stage and differentiation needs of different types of students. For example: according to different specialties, can set up specialized modules, the content of each professional subject problem base, according to different degrees, can choose the module that tends to basic or improve. Overall, fully grasp the needs of students, teaching according to their aptitude, to achieve deepening useful guidance.

Set up a number of functions, many aspects to meet the needs of students: mainly including query questions, ask questions, answer questions, comment answer and other functions. system roles are divided into: ordinary users, volunteers (teacher assistant, also responsible for solving classmate problems), teachers (management system), the Mini Programs also set up a background management system based on the VUE framework, responsible for modifying announcements, setting permissions, editing function modules and so on.

4.2 Client

(1) search real-time query is not required, will increase the pressure on the server.

(2) search problem, the returned problem list does not need picture thumbnail display.

(3) the list of questions returned by the contains: title, description of the question, question release time, resolution, number of answers, poster information (nickname, id, role), question id, subject category, number of likes, one reply details (no reply shows no reply to this question for the time being).

4.3 Management end

4.3.1Data monitoring：

log in today, number of questions released, number of questions answered | data distribution of nearly one month.

4.3.2 Management issues

(1) Delete questions (will delete the information to which the question belongs [comments & answers to questions]).

(2)You can delete the answers under the questions (delete the answers and comments) separately.

(3)Delete individual comments

4.3.3 User Account Management

Account Role Setup

5. System design implementation and testing
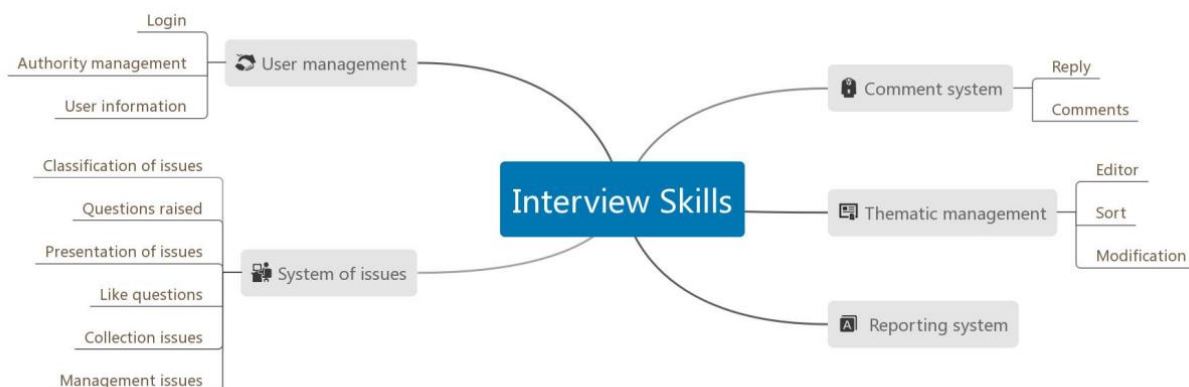
5.1 Design of functional modules

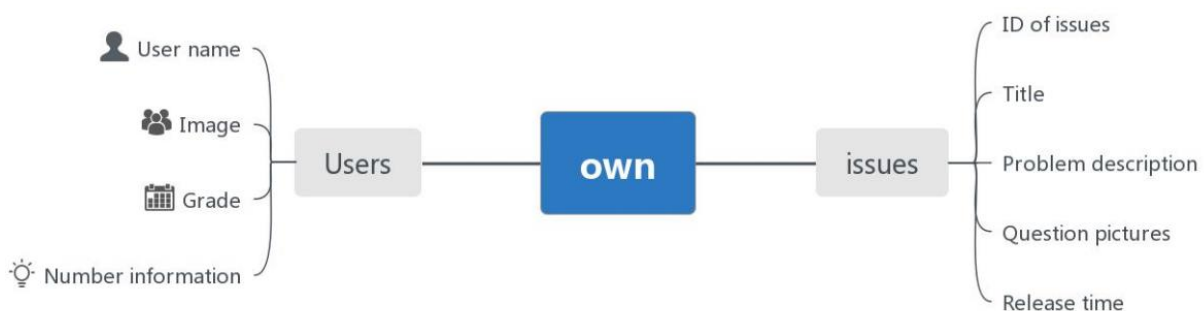Figure 1 Functional design drawings

5.2 Database design

Figure 2 Database E R diagram
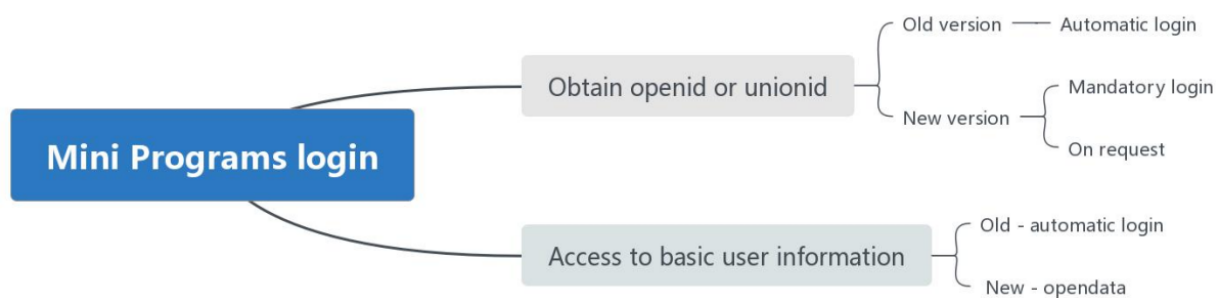
5.3 Mini Programs Automatic Login Implementation

Figure 3 Automatic login design

About authorization:Overall, there are two licensing models, one is mandatory authorization, the other is on-demand authorization, no matter what the process can basically be classified as both authorizations.

Mandatory authorization is used here. Scope of application: the user's identity is strongly dependent on the small program, the user must know the user's information as soon as it comes in, or the user must come in according to the user id to pull the relevant resources.

6. Follow-up Study and Work Outlook

College student academic consultation is one of the important contents of college student academic guidance. In recent years, colleges and universities pay more attention to the collection and collection of academic counseling cases. Colleges and universities should choose the characteristics of modern internet, such as large amount of information, flexibility, anonymity and the ability to expand the content of the corresponding academic guidance for college students. On the one hand, using the characteristics of network anonymity to further improve the participation of college students; on the other hand, college students can draw a lot of scientific and favorable learning information through the network, cultivate their learning preferences, and arouse their learning potential. Help college students master scientific learning methods and learning strategies in an all-round and systematic way, and further improve their academic quality.

7. Conclusions

Based on the research of HTML5 WeChat reading Mini Program, this paper carries on the data analysis according to the survey questionnaire, outputs the user's demand and the user portrait. At the same time refer to the design specifications of mobile side products for WeChat reading Mini Program product design, at the same time according to the product design and according to the development specifications of WeChat Mini Program development WeChat reading Mini Program. It is hoped that this program can bring more beneficial learning ways to our students and realize its value.

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