# Application Research of New Media Integrated Platform Based on Public Number

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2/10/10/19/00/06 120:00/11/ 17/00/06 10 1@44:00/11, 17/00/20/00/11

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**Abstract.** In this paper, the use of HTML5 (HyperText Markup Language 5) to implement WeChat applet, the important thing is H (HyperText: Hyperlink, save memory space, reduce redundancy, User-friendly) in HTML5, conduct market user demand survey, make Accurate business development trend, rational use of CSS and JavaScript to beautify the production platform interface, java realizes the mobile terminal APP and PC side are visible to users, this public number will be oriented to the general public, especially the sports-loving, young people, will Improve the visualization of learning information, the scientific management of the background, the security of user use and the intelligence of index evaluation.

#### Introduction

With the continuous development of Internet technology, new media such as WeChat applet will become an important channel for acquiring customers and marketing in the future. The development is limitless. Under the era of "Internet +", [1]new media has become an indispensable link for many enterprises. Such as WeChat, Weibo and other self-media platforms, have become the company's image to establish a brand of springboard. With the opening of the functions and interfaces of WeChat applets, more and more companies are aware of the huge market prospects of small programs and have joined the ranks of small program development.

# Research Background

The small program comes with its own promotion. First, it can be searched by WeChat users within a radius of five kilometers. Secondly, the store is ranked according to the distance, and has nothing to do with the size of the brand. It can be used at the touch of a hand, and the small program can be used without downloading and installing. Can reach users at the lowest cost, with the opening of the small program market, 80% of the App will be replaced in the next two years, and the small program can also generate icons to the mobile phone desktop. Searching WeChat open small program Keyword search, and a quick entry of small programs, bring more exposure and opening opportunities for commonly used small programs low cost, small programs can greatly reduce development and operation costs. The profit that is pumped away by the platform in a year is amazing, so the development of small program management can be saved. [2]A lot of fees, a smoother experience, the fluency of small programs can almost match the App, in the WeChat ecosystem, small programs can kill H5 pages in function and experience, because H5 pages often appear stuck, delayed, loaded Slow, insufficient permissions, and these problems will not appear in the applet. The small program focuses on the user experience and online, and gradually integrates the WeChat public account and the H5 function to supplement its shortcomings. [3] Therefore, the public number + small program is a perfect combination, the circle of friends, the public number and the small program.

In view of the above situation, this paper conducts related research on "V-Fire", using small programs, HTML5, java, public number, to achieve its own characteristics in the "V-Fire" research and development for the advantages and disadvantages of existing research platforms.

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#### **Characteristics and Innovation**

The main feature of this paper is to closely combine the methods and technologies such as .wxml, .wxss, .js, .json, etc., and make full use of the .wxml file (page structure file) tag language, similar to html, responsible for page structure, binding data. The wxss file (style sheet file) is similar to css. Most of the css styles are the same. The difference is that the applet has a new size unit rpx. Similar to the dp in android development, it is to solve the problem of pixel ratio of different screen sizes. Use .js file (script file) to run our logic, using js language, similar to javascript in web, js is responsible for solving dynamic interaction of page in small program; using .json file (configuration file) is current The global configuration of the applet includes all page paths of the applet, interface performance, network timeout, bottom tab, and so on.

The main innovation of this paper is to use the java background and HTML5 to develop the "V-Fire" interface, as shown in Fig. 1, to realize the visualization of the user.



Figure 1. business module interface

The research content and results of this paper cover a lot of knowledge in the computer field. The research visualization software is not only promoted and applied in the WeChat circle of friends, but also can be promoted by new media such as Weibo and Post Bar. With the development of the times, these platforms tend to provide complete visual information system applications while also requiring background maintenance of process control management.

# **Main Module Function**

#### 1. Pulsation.

The small program has a complete online comment function. After the user experience, the evaluation can be given directly, and the coach ranks according to the rating. Data can understand user feedback, timely improvement and optimization. It is set up to solve the problem of repeat customers in the gym, and at the same time save costs for operators to save costs for users. There is a lot of room for building fitness programs:

Pulsation has the following features:

- a)Interaction: Users can show their sports scores on WeChat, which can enhance the interaction with friends, and at the same time, it can promote the promotion of small programs.[4]
- b)Video Fitness: For users with less free time, you can make your own leisure time more meaningful by following the short video of the software for a minute. You can also skip weight loss aerobics on your mobile phone.
- c)Data Recording: By using the Sports Fitness program, you can easily record the user's trajectory, and the running track can be easily viewed on the phone.
- d)Data management: User's weight and blood pressure data can be managed on the "pulsation", so that users can have a clearer understanding of their physical state.

## 2. Education.

a)Online learning.

"Education" records the course as a video and puts it into a small program to let students watch the study online. According to user needs, set free, fee-based courses, open courses: computer field (programming development: java, Python, C language, front-end development: HTML5, mobile development: WeChat development, Android), English.

- b)Distance learning. Open a live broadcast, teach students directly in the small program, and have a dedicated network of teachers.
- c)Data query. Provide users with data queries, such as student grades, library collections, student information, etc.
- d)Recharge payment. Tuition fees, training fees can be paid in small programs, and users can be invoiced in small programs.

# 3. Listening to beauty.

The US listening player obtains music related data through the QQ music interface. First, a music category list is displayed on the page. After the user selects the category, the user selects a music list that meets the requirements from the QQ music, and clicks a music in the music list. That is, enter the play page to play.

"America's Listening" needs to design 4 interfaces, which are:

Music classification list interface.

Music list interface, select a certain category in the interface shown in the music classification list, list the music tracks under the category, in order to make the interface beautiful, display a picture, this picture directly obtains the Album cover picture of the track.

Music play interface, click a track in the list of tracks shown in the category, enter the interface, display the album picture at the top, display the song name, artist name.

#### 4. Figures.

After these interfaces are created, you need to use PS to create the corresponding icons. As shown in the service interface of Fig. 2.

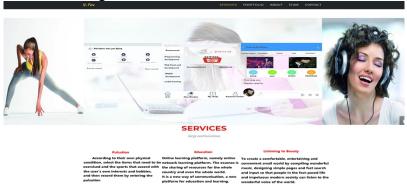


Figure 2. service interface

#### Research

#### 1. Research objectives.

The main purpose of this paper is to establish a new media integrated platform with the public number as the main body, to develop the direction of precise business operation, improve the visibility of the business, and build an advertising promotion platform for various businesses to provide users with entertainment and learning integration. Based on the offer of some recently launched products to better meet the needs of users. The platform developed by the company is owned by the operator. The public number is promoted first, the new media operation strategy is adopted, the market is opened, and the agreement is further reached with the merchant to promote the advertisement. For each section of our study (education sector), entertainment (beauty listening), and fitness integration.

#### 2. The key issueData processing technology

a)Data processing technology: In the WXML file, different styles are displayed according to different states. The core of data processing is the data of the js file Page. He is an important bridge between WXML and JS interaction. The data that WXML page needs to display needs to be defined in data, otherwise it will not be displayed on the page. The data in data is set and initialized through network requests or some logical processing.[5]

b)Data analysis technology: use java back-end tracking analysis to provide real-time analysis of small programs and historical trend viewing capabilities. Real-time monitoring of small program data changes, first grasp the data information, refining value; observe historical trends, understand the development of small programs, view detailed data of individual pages.

c)Data optimization technology: Avoid using set Data multiple times in the same process, WePY chooses to use dirty check to do data binding optimization. The dirty detection mechanism draws on Angular JS. The performance problem is that every time you perform a dirty check, you need to iterate through all the data and make a deep comparison of the values. The WePY mid-depth comparison is the underscore's is Equal method. There is no concept of components in Angular JS 1.x. Component development, support component looping, nesting, support component Props value transfer, component event communication, etc..

## 3. Research feasibility

This paper combines HTML5, small program, database technology to manage and process WeChat public number, through in-depth research, method and technical feasibility.

The research and development environment is feasible. Using Windows XP or higher operating system, development tools: Eclipse, FileZilla, WeChat Developer Tools, a server with domain name configured with SSL certificate (https)

Research technology is feasible. Collect and organize a large amount of user information (sports status, user's physical condition, user's relationship, and US listening records), integrate and process them with HTML5, and use the back-end database to organize and form information that meets relevant standards. Required use knowledge: Spring MVC framework, Java+HTML+CSS+JS.

# 4. Prospect analysis

In the survey, it was found that there are two biggest needs for small program developers: First, small programs that have their own liquidity capabilities require external traffic blessing and more promotion methods. Second, some small programs have a lot of traffic, but lack a cash flow path. Based on these two requirements, the launch of small program integrated marketing services.

What are the future development trends and opportunities of small programs? How does the applet drive traffic and effectively convert fans? What is the logic of small program investment in the eyes of investors? The real advantage of small programs is not the low development cost, but the low cost of use. The cost of using the app is too high, resulting in high promotion costs, and small programs can help break this dilemma.

Mobile Internet is more and more popular among users. Mobile Internet+ is also receiving attention from various industries, especially from the rise of the media industry. The marketing of mobile terminals has also started a wave of frenzy. Now the marketing model of small program + public number has risen. This is also the reason why enterprises pay close attention to small programs. The easiest way to do this is through small programs. The characteristics of the small program have already determined that it will be a huge business opportunity for mobile terminals within five years.

#### Conclusion

This article uses WeChat developer tools to make small programs applied to WeChat public account, apply MySql database, Eclipse to background link data, connect a server with domain name configured with SSL certificate (https) to the background interface, and use the new media communication platform. Promote operations and learn the skills related to CSS and JS in HTML5. In short, the research content of this paper is relatively new. The research ideas and application results are required by many entrepreneurs and businesses. They are practical and have broad prospects and are worthy of promotion and application.

There are many application scenarios for small programs, such as enterprise display small programs (similar to PC-based corporate websites), mall type applets (e-commerce), order types (catering industry), ordering flowers, online registration (medical industry), and Develop small program games, such as jumping, Chinese chess, and happy landlords. The number of users on WeChat is about 900 million. With such a large amount of traffic, there are definitely many

business opportunities hidden above. The basic knowledge is firmly grasped, the technical links are understood, and the project is ready, such as page data binding, component usage, page jumps, parameter passing, configuration files, api calls, etc..

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