

Design and implementation of a cloud-based resume creation applet

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Abstract: The effectiveness and quality of employment of university students remains an important and ongoing concern in today's society. At the same time, it is especially important for job seekers to create an excellent resume in an efficient way. In addition, we designed a small application to assist job seekers in creating resumes, taking into account the fact that WeChat applets are download-free, at your fingertips, use and go, do not occupy mobile phone memory and have low development costs. The applet uses the cloud development model to achieve a series of functions instead of the traditional development model, solving a series of problems in making resumes. It has the characteristics of running efficiently, consuming less time, not relying on the background, being flexible enough to respond to business needs more quickly. The applet has a simple and generous page and is easy to execute and operate, while the background also adds functions such as user management. The applet meets most of the requirements of users in the resume creation process. Based on cloud development, this paper provides an in-depth analysis of resume writing and production and details the applet work process.

Keywords: WeChat applet; resume creation; cloud development.

1. Introduction

In response to the problems that currently exist among university students, especially in the area of employment, a discussion on resume creation was triggered and a customised resume creation and publishing app was developed that includes filling in information, selecting templates, publishing resumes and user management. This paper presents a detailed description of the requirements, functional analysis, feasibility analysis and system implementation of the app.

2. Research Status and Significance

The university years are a transition period from campus life to society, and behind the colourful campus life is a time for university students to explore society, with a wide variety of interviews, and with that comes the problem of resume creation. It can be said that your resume is the first way for others and even for the company to understand you, and the quality of its production is related to the company's understanding of your initial image. More importantly, it determines whether it is necessary to get to know you further, i.e. for an interview. However, at present, there are more or less problems in the resumes of university students, such as: incomplete information, lack of focus, unreasonable design and lack of concise expression, which may cause some negative impact on job search. Therefore, job seekers are in urgent need of a suitable resume to add colour. If you are struggling with the layout of your resume, the information you need to write, the language skills you need to use and the style you need to use, our resume builder and publisher app can help you.

The app is designed to address the various problems that job seekers encounter when creating a resume, optimising it in every dimension and making the process of creating a resume simple and perfect for avoiding problems. The app is easy to use, no registration is required, the code can be used,

the personal information is filled in according to certain specifications, the template of your choice is selected and then the resume is generated with one click, it is also extremely convenient to modify the information with one click and then reprint it. With a suitable resume, you have already taken the first step to success.

3. Introduction to the System

3.1. Requirement analysis

3.1.1. Description of requirements

The applet is mainly designed to better help university students or job seekers to create resumes to cope with market competition and to adapt to the mainstream trends of today's society. The back-end of the applet provides functions to manage users and manage templates. The main functions implemented by the applet are as follows:

- a. authorisation of users;
- b. the upload and modification of avatars
- c. addition, modification, deletion and enquiry of user personal information;
- d. uploading and reading of image information
- e. the selection of resume templates and the drawing of resumes
- f. generation and saving of resumes
- g. the viewing of resumes posted by individuals
- h. user management and administrator management;
- i. management of resumes;

3.1.2. functional requirements

According to the requirement statement, the applet can be divided into four modules: personal information module, resume template module, user management module and template management module. The normal operation of all the above four modules is based on successful authorisation, the details of which are as follows:

The personal information module is the premise and basis for the subsequent operation of the applet and the generation of resumes. Users only need to click "fill in information" to

fill in personal information carefully, click "save" button to enter the information into the database, and then you can carry out subsequent operations. The personal information module includes basic information, school experience, work experience, vocational skills, awards and certificates, job search intentions, interests and self-evaluation. If you do not fill in your personal information truthfully and generate a false resume, it will affect your next interview process. Therefore, the personal information section is of paramount importance and should be filled in truthfully.

The resume template module is the key step to generate a resume. After filling in personal information correctly, users click on the "Select Template" option and select a suitable template according to their preferences and where to send their resume to generate their own resume, which is in image format and can be printed by the user.

Administrators can only gain access to the backend management system of the app after clicking on the "Administrator" button on the My page and verifying their identity. The user management module of the backend management system allows you to delete users, draw a user relationship map and query the number of users.

Only administrators can access the backend management system of the applet to manage resume templates, including the functions of modifying templates, adding templates, deleting templates and administrator authentication.

3.2. Feasibility analysis

3.2.1. Technical feasibility

Developers can use cloud development to develop WeChat applets and games without having to build a server to use cloud capabilities [3]. The use of cloud services for the back-end of applets is also an emerging back-end development method today. It is also easy to use because wxml, wxss and other Wechat development languages have common features with html and css. Therefore, it has a high technical feasibility.

3.2.2. Operational feasibility

The operational feasibility of the applet depends mainly on whether the staff can adapt to its working mode. As the cooperation between the two parties is on a contractual basis, the technical staff of the applet will provide systematic training to the staff before the applet is put into use. The staff are helped to adapt to the working mode of the small program as soon as possible. With computer technology running rampant today, almost everyone is equipped to use and manage this applet management system. Moreover, compared with the traditional APP, the applet does not need to be downloaded and installed, so the operation of the user will be easier and has a high operational feasibility.

3.3. Design of the system

3.3.1. Routing design

The main pages of the applet are set up as follows:

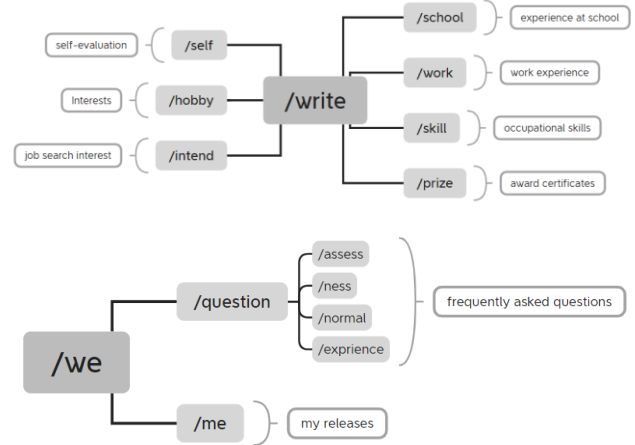
pages/home/home: Home

pages/we/we: the "My" page, where users can see their saved resumes"; you can also see the "Administrator", click "Administrator "Once you have successfully authenticated as an administrator, you will be able to access the backend management page of the applet.

pages/write/write: the "fill in information" page. Once the user has authorised access to this page, they can upload their avatar, fill in their personal information and save it, and the next time the page is loaded, their information will be displayed.

pages/model/model: "Choose a template" page, after entering this page, you can see a sample resume template, users can simply choose the appropriate template to enter the resume preview stage, choose to save or re-select the template, save the completed resume can be printed or go to My resume to view.

In order to enhance the readability and modularity of the code, a route jumping schematic has been designed as follows:



3.3.2. Database design

The back office management system implements user information acquisition, administrator login and management issues, so a "user" table needs to be created to store user information. The openid is the master code of the "user" table. This is shown below:

name	type	description
openid	string	Primary key (auto-generated)
age	string	age
name	string	name
sex	string	sex
assess	string	assess
email	string	e-mail
hobby	string	hobbies and interests
imgUrl	string	path to avatar image
school	string	experience at school
work	string	working experience
intend	string	job search interest
skill	string	occupational skills
tel	string	telephone number

4. System Implementation and Testing

4.1. Home page

The default page when users enter the app is divided into two sections: 'Fill in Information' and 'Select Template'. Users must fill in their personal information first and then select a template in order to generate the correct resume. If you click on "Select Template" first, the resume generated will be empty and will not meet the actual requirements. Bind the tapClick event to the "Fill Information" module and use the cloud function to get the user data; bind the tapClick1 event to the "Select Template" module and use the cloud function to get the resume template data.

4.2. Fill in the information page

After successfully authorised users enter the personal information page, the first thing they will see is the upload resume photo module, where they can click on the "Photo ID" button and the options "Take" and "Select from album" will appear. "This module uses the wx.chooseImage() method to

complete the above two options. The uploading of photos is done through `wx.cloud.uploadFile()`. Next is the basic personal information, which includes: name, age, email address, ethnicity, gender, marital status, mobile phone number and political affiliation. Next is the module "school experience", "work experience", "professional skills", "awards and certificates". This module is bound to a page jump event, and experience can be added in subsequent pages. Finally, the "Job Search Intentions", "Interests" and "Self-evaluation" modules are also bound to jump page events after clicking on them, so that you can write your job search intentions in the subsequent pages. Once the personal information is completed, click on the "Save" button to save the completed information to the cloud database through the cloud function. The next time the user enters the personal information page, the corresponding personal information will be retrieved from the cloud database by matching the user's openid and rendered directly to the user's personal information page.

4.3. School experience page

Take "School experience" as an example, after entering the school experience page, you can see two buttons "Add" and "Save" at the top of the page, users can enter an experience according to the standard format and click "The user enters an experience in the standard format and clicks 'Add', adding a number of entries in turn according to the actual situation, and finally clicking the 'Save' button to save it to the database. Similarly, the next time you enter the page, you will get the corresponding school experience from the cloud database by matching the user's openid and rendering it directly.

4.4. Interests page

The "Interests", "Job Search" and "Self-evaluation" pages are similar, so this article takes interests as an example. On the personal information page, the user clicks on "Interests" to enter the Interests page. This allows users to edit their interests and enter them into the database. The next time the page is accessed, the information is retrieved from the cloud database and the page is presented.

4.5. Template page

After filling in personal information, users can return to the home page and click on "Select Template" to enter the template selection page, there are currently six resume templates in the app, users can select the appropriate template according to the actual situation.

The page gets the user's information from the cloud database and draws the resume using canvas, the `fillText()` method is used to draw the text, `drawImage()` draws the image, `wx.saveImageToPhotosAlbum()` saves the finished resume as an image. After entering this page, the system will automatically draw the completed resume, the user just needs to click the save button, after which they can enter the My Posting page to view the resume images they have generated.

4.6. My resume page

After entering the app, the user can switch from the home page to the My page by clicking on the tab key "My" at the bottom of the page, and the first time user of the resume

creation and publishing app (unauthorized user) will only see a "Login" button on the page. After the user has logged in and successfully authorised, the page can be seen to successfully load the user's WeChat name and WeChat avatar, at which point the user is able to take a place in the cloud database and can enter the information page to enter personal information (the page style is different before and after successful authorisation), and the function `onGotUserInfo` is used to obtain information from the cloud, i.e. whether the user has been authorised, as a basis for determining how the page is layout. If it fails, the user is authorised and a new user profile is created.

Users click on my resume in my page to enter the resume publishing page, which displays the user's saved resumes in the form of a book page, and users can view the resumes they have written in the form of a page flip. The page flip effect is achieved using animation, timer `setTimeout`, message box `showToast`, translate `translateX` and `translate translateY`, rotate `rotate` and other functions.

4.7. Frequently Asked Questions page

The Frequently Asked Questions page lists some of the questions that users may encounter when using the applet, such as sample forms for writing certain information, or recommended ways to write it. These questions and answers help to guide the user through the correct way to fill out a resume.

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