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Design and Implementation of Friendship Information Management System

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#### **Abstract**

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As interpersonal communication becomes more and more extensive, the various information of friends through the traditional way such as business card folder or record book is not only troublesome, laborious, but also easy to lose, in this background of extensive friendships, the traditional way of managing friends' information is no longer applicable, for this reason the design of modern friends' information management system is particularly important. In order to meet the better management of friends information, the author based on the problem of friends information management, based on the analysis of functional requirements for the design and development of the friends information management system, using Java language and MySQL database for the design of the friends information management system, for more people to use this system as a reference.

# **Keywords**

Friend Information Management; MySQL; Java.

#### 1. Introduction

With the extensiveness of interpersonal communication and the rapid development of computer technology, the management of buddy information has brought considerable trouble to individuals because of the large number of buddies, large amount of information and easy to lose. Easy to operate and feasible design of the buddy information management system can better achieve the function of adding, deleting, changing and checking buddy information.

# 2. Demand Analysis

Users can log in and add, delete, change and check various information about their friends such as name, gender, birthday, contact information, personal preferences, home address, etc.In addition, it needs to include some special features, such as reminders for friends' birthdays, invitations to friends, etc., a day in advance to ensure that users have sufficient time to prepare. Accuracy requirements:

- (1) Completeness and correctness of information, such as cell phone number with 11 digits, date of birthday as valid date, etc.
- (2) The same key data to give distinction. The same name of friends is distinguished by number to prevent information overwriting.

# 3. Technical Analysis

Development language: use Java language for development, Java language compared to c, etc., the syntax is simple, and Java is pure object-oriented, simple design, Java language provides a security mechanism to prevent malicious attacks, has a better security and robustness, to ensure the safety of the friend information is not leaked.

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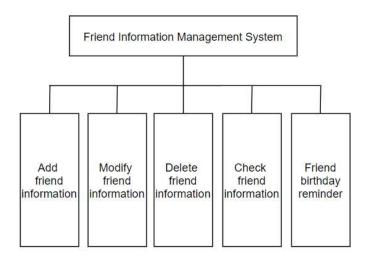
Development tools: choose Eclipse, suitable for java language, development, writing, errors, compilation, help in all aspects is very convenient, while open source, free to use[4].

Database: The database of this system uses MySQL database, MySQL is the most popular relational database management system, while having the characteristics of small size and speed, has been widely used, suitable for buddy information management system[3].

# 4. Design Analysis

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#### 4.1. Functional Framework



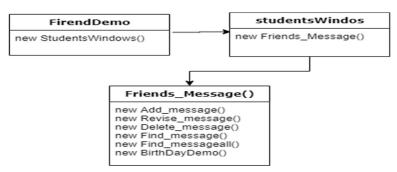
**Figure 1.** Framework of buddy information management system[1]

### 4.2. Login Module

Each user has his own friend information, the user logs into the friend information management system to operate the friend information, by connecting to the local MySQL database, by looking for the input account number query, if this account exists, and verify the correctness of the password, if correct, then directly into the system.

## 4.3. Friends Information Management Module

The template framework for friend management:



**Figure 2.** Functional design after successful login to the system

If the login is successful, you will be taken to an administration screen as shown in Figure 2.

#### 1) Friend information addition and deletion module

The user can add the friend information by entering the user's name, gender, birthday, home address, personal hobbies, other friend information, and design the corresponding label to select the corresponding option to classify the friend, such as college classmates, etc. Click Add

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delete[5].

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to call the event stored in the database, delete the friend information first by the name or number of the friend to check whether this friend information exists, if it exists, then you can

2) Friend information modification module

Modification of friend information through the query module, the first query whether the friend exists, if it exists, you can modify, modify the content directly overwrite the original content.

3) Friend information query module

The query of friend information is like looking up the record book, there is a directory to find more aspects, so the query interface set up a variety of query methods, through the increase of friend information set up when the label can be classified to find, for example, to find high school classmates, the query will appear all with high school classmates labeled all classmates, this search method effectively solves the reality of forgetting the correct Chinese characters of the name, etc., can be a better solution to the The actual problem. You can query all the information of your friends, and the information of the query will be shown in the interface in order according to the date of addition, and when you query by name, the information of the same name will appear, but with different numbers, so the information of your friends is not the same[2].

4) Friends birthday reminder module

Define a method for the birthday date and the system time comparison method, through the year month comparison, first of all, compare the year, if the year has been born when the month comparison, if the month is equal then continue to compare the day, if the month and day are equal to return the value of 1, if the user logs in this system, it will directly pop up the corresponding friend information, and in the system home page display the name of the nearest friend birthday and the number of days away.

#### 5. Conclusion

The buddy management system combines the needs of modern society, can meet the storage of buddy information, and contains the birthday reminder function, to meet the needs of people in today's society, and the design and development of the buddy information management system, can accurately store the information of the buddy, easy to query and modify, while this buddy information management system can be applied to other aspects, such as the management of student union personnel, the company's management of various departments of employee information, etc., has a relatively wide range of uses.

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