

A Customer Relationship Management System Based on Django

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Abstract: in view of the shortcomings of the current company's customer relationship management system, the design and implementation of the customer relationship management Web platform based on Django framework, which uses jquery and Sqlite database technology. Customer relationship management system includes login registration module, public account list, customer follow-up records, consulting records and other modules. The system clearly realized the relationship between sales staff and customers and customer follow-up records, so as to improve the efficiency of staff, and the system has strong mobility and reasonable structure, which can effectively meet the company's needs for customer management.

1. Introduction

Traditional customer relationship maintenance is recorded in Excel or notebook, time is not convenient to query. Sometimes, each member of the team can't keep track of their own records, so they can't work together. It is easy for them to bump into each other and affect their work efficiency. In this paper, a customer relationship management system is designed and applied to effectively record all customer information and contact information with a curved pin, which can be quickly inquired, the customer status and follow-up status are clear at a glance, the team coordinates immediately, and the same management prevents customers from bumping into each other, thus greatly improving the work efficiency

2. System Feasibility and Requirement Analysis

2.1 Feasibility Analysis of the System

From the technical feasibility point of view, python language, django framework are open source, the database USES Sqlite database, technically mature and feasible, low technical difficulty, can fully meet the use of small and medium-sized enterprises.

2.2 System Requirements Analysis

From the perspective of functional requirements of the system, in the process of customer management, the customer may belong to the private customer of a certain sales person, or may be the public customer of multiple sales. In addition, during the customer registration process, some sales personnel will provide follow-up services to the customer. Therefore, the functional modules of the customer management system need to have public customers, private customers and customer follow-up records, and each module is divided into several small functions.

(1) Public door list function

The function of public account list is mainly used to show customers who have not received follow-up service from sales personnel or other sales personnel give up service. The function of transferring public account to private account, transferring private account to public account and deleting customers are included in the function of public account list. In addition, other functions such as searching customers and editing customers are also set.

(2) My customer function

My customer and public account list function is similar, but the customer shown in my customer is the customer of the sales person's follow-up service.

(3) Customer Follow-up Records

Customer follow-up records mainly record the sales personnel to customer service status information, customer selected service records, etc.

3. General Design of the System

3.1 Functional Design

The system is mainly divided into registration login, public account list, my customer and customer follow-up records and other modules, each module has a number of small modules, these modules improve the system function, make the system processing business more efficient, to ensure the robustness of the program.

3.2 Database Design

This database uses Sqlite to store and manage the data, mainly employee table, department table, customer table, campus table, class table, follow-up record form, application form and payment record form. and this data design is fully in line with the data independence and data integrity of the relational database, while meeting NF3 paradigm standards.

E-R graph model is helpful for designers to better understand the modeling tool of maintenance data table. The core elements of E-R graph model are: entity, attribute and relation. The E-R diagram of customer relationship management system of educational and training institutions is complex, and here we have some important E-R models in reality.

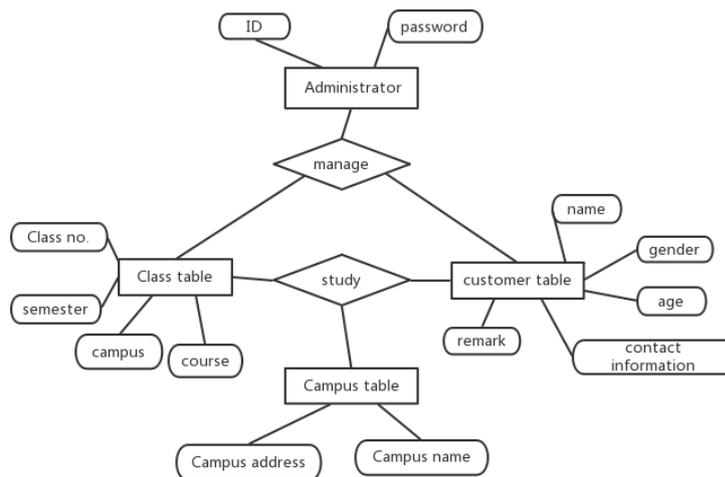


Fig.1 E-r Chart

The above is the logical design of the system, by converting conceptual information into E-R graph information, and then into a logical structure consistent with the data model supported by the DBMS products used in the system design.

4. Systems Development Tools

The system uses Django framework, python language and front-end jquery and bootstrap development.

4.1 Django

There are a number of different web frameworks under the Python, Django one of the most representative, and many of the websites currently running are written by Django. Django is an open source Web application framework written by python. The MVC pattern noted in Web server development domain is to divide Web applications into three layers: model (M), controller (C), and view (V), which are connected in a plug-in, loosely coupled way. M represents the model, responsible for business object and database relationship mapping; T represents the template,

responsible for how to show the page to the user; V represents the view, responsible for business logic, and calls Model and Template. when appropriate The above three layers require a URL distributor that sends URL page requests to different View, View calls the corresponding Model and Template..

5. System Implementation

5.1 System Architecture Implementation

The front-end page is developed with HTML5, CSS and Javascript, and the registered login page adopts ajax technology. Django framework itself integrates many functions such as ORM, model binding, template engine, cache and session.

5.2 Specific Realization

The list of customer information is shown below:

number	customer name	gender	QQ	phone number	customer source	consultation service	current status	salesman	class and grade	follow up records	edit	delete
1	li mao	male	1234386843	162537942	QQ Group	2020-03-24	signed	damon	Linux中高级3(Nanjing campus)	Follow up the details		
2	lu jiazui	male	27830200992	278993221	QQ Group	2020-03-24	studying	damon	Python高级全栈开发3(Shanghai campus)	Follow up the details		

Fig.2 Customer Information

6. Conclusion

The development of the system effectively solves the difficulties of customer management, effectively improves the communication between sales personnel and customers, and promotes the development and follow-up service of sales personnel business. The system records the tracking of old customer service, improves the ability to develop new customers, centralizes customer management, protects the company's customer resources, and facilitates the company's performance management.

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