Study of Enterprise Human Resource Information System

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Abstract

In this paper, B/S architecture and mature application framework are used including Struts, Spring and Hibernate to design and implement a enterprise's human resource information system. The system is close to the business demand, adopts the layered design method, which makes the system on the premise satisfying customer demand, to improve flexibility and robustness of the program. In the paper, the beginning is the description of the research background and significance to prove the social and technical value of project selection. Then, related technologies in the thesis, so studied. Application framework is core of concept of application framework is introduced from the concept and principle of software architecture, and the three application frameworks are studied, including Struts, Spring and Hibernate. Each of frameworks is discussed and the combination style of three frameworks is also showed.

Key words: BROWSER/SERVER ARCHITECTURE, APPLICATION FRAMEWORK, SSH

1. Introduction

With the increasingly fierce market competition, enterprises have to carry out informational construction in order to improve productivity of labor. Using computer hardware and software technology and network technology, constructing the network, electronic and information-based human resource system is the critical link in the construction [1].

With the rapid development of computer technology, enterprise's information is an important systematic innovation which enterprise is facing. It contains all aspects of the enterprise operation and management. And human resource is the key important foundation to the enterprise. Thus, human resources enterprise has become the priority. Only the reasonable use of human resources can constantly enhance the vitality of enterprises improve enterprise's competitiveness. Based on the further study of HSMIS's present development situation, this paper and studies the advantages and disadvantages in development of the domestic HSMIS [2].

Then, the paper proposes a model of HSMIS base on SSH framwork. The content is as follow: Development present situation of MIS is analyzed, a model of system based on SSH framework is proposed, and relevant technology is introduced in detail. The feasibility of the system operation is analyzed, and the business and functional are dicussed in detail though use case diagrom. The integrated design of HSMIS and the flowchart are discribed, and the business logic is discribed by using tables. Finally, design is diccussed. The HSMIS based on SSH framework is implemented; the program of the five business model is analyzed. System test is done to the whole system to make sure the system meets the re

2. Analysis of Countermeasures

In today's rapid economic development in China, the development of small and medium-sized enterprises has become a topic of age. Because of technology, scale, history, Chinese SME has a slow development, and it must chow informationization to catch

developed countries. Therefore, the implementation of human resources information is the intrinsic, the trend and the choice of SME. (Table 1.)

Tab. 1. User Information

No	Field	Data Type	empty	Key
1	ID	Int(10)		Yes
2	Name	Varchar(20)	Yes	
3	Usertype	Varchar(10)	Yes	
4	Username	Varchar(20)	Yes	
5	Password	Varchar(20)	Yes	
6	Idtype	Varchar(20)	Yes	
7	Idnumber	Varchar(20)	Yes	
8	Sex	Varchar(10)	Yes	
9	Position	Varchar(20)	Yes	
10	Height	Int(10)	Yes	
11	Heave	Int(10)	Yes	
12	Cardnumber	Varchar(10)	Yes	
13	Politics	Varchar(20)	Yes	
14	Phonenumber	Varchar(30)	Yes	
15	Email	Varchar(20)	Yes	
16	Address	Varchar(100)	Yes	

Through the research of the human resources informationization in this article, it comes out the human resources informationization connotation, the function as well as the present situation of human resources informationization in country's SME. The author brings up the corresponding countermeasure in view [3]. The existence's subject matter in present SME includes: Leadership's neglect, fund insufficiency, the backwardness of technical, talented person's flaw, system's un perfect as well as supplier's deceit and so on. Through the analysis of existence's question, the author proposed that the small and medium-sized enterprise development must walk the informationization's path, but in the process of utilizating human resources informationization [4], Our SME must start from the transformation management idea, and then strengthens the importance on leadership the value of the informationization, chooses the appropriate supplier, invests certain fund to carry on the construction, and needs to sharpen the human resources superintendent's IT ability and the staff quality, strengthens the specialized technical talented person's reserve, take the outstanding enterprise culture as human resources management informationization's implementation creation advantageous culture environment, then carries on the conformity using the e-HR system to enterprise's complete human resources, enables the enterprise to achieve the spanning-like development, strengthens its competition strength.

The author has investigated the situation of human resources informationization in SME in Wuhan from Xinxiang, and chose the labor-intensive form enterprise company to carry on the empirical analysis for the example. Through the data which collects to the author carries on the regression analysis using the Reviews software to obtain: The SME's benefit and the investment of human resources informationization construction is being related.

3. System design

In recent years, information technology and the rapid development of all walks of life have emerged by means of information technology instead of the traditional manual operation [5-7]. For businesses, information technology innovation to enable management tool is also undergoing rapid changes. As a branch of the management, human resources management is also the trend of the times, with changes in information technology. (Fig. 1)
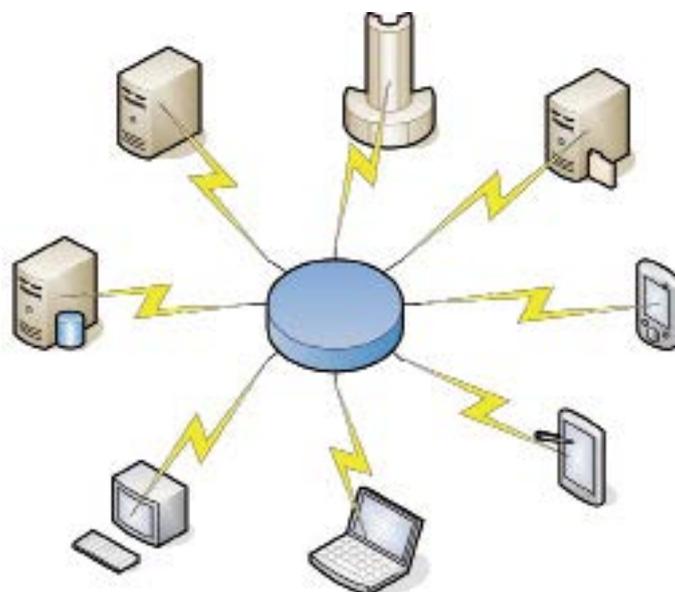

Figure 1. System Artechture

With the increase in state-owned enterprises on the importance of human resource management, many companies have begun building of human resources information will always be this or that problem, but in the process of system construction. How to pre-project consulting, human resources management issues to identify the existence of the business, to select products suitable for the enterprise human resources management information system, is a problem worthy of our study. (Table 2.)

Tab. 2. Turnover Information

No	Field	Data Type	empty	Key
1	Id	Int(10)		Yes
2	Username	Varchar(20)	Yes	
3	Applytime	data	Yes	
4	Dept	Varchar(20)	Yes	
5	Position	Varchar(20)	Yes	
6	Reason	Varchar(20)	Yes	
7	Audit	boolean	Yes	
8	Remark	Varchar(100)	Yes	

In this paper, the author more wants to exp lain the actual problem which the small and medium-sized enterprise faces in the process of informationization's development, as well as how to solve these problems to lay the foundation of the future development of the SME, but not merely to the e-HR system's superiority statement. I believe that the SME will dove the existence question and will utilize informationization better and better, it will administer the human resources' related data from human resources management angle embarking, it will thus promote the organization efficiency, save the expenses, increase the profit of enterprise, enhance degree of staffs satisfaction, advance the management of comprehensive human resources.

The overall design

Methods and the strategic function of the human resource management, the article has separately analyzed the theory significance and the practical significance of enterprise human resources management informationization concoction, elaborates the necessity of the Enterprises of Our country carry on the human resources management informationization construction, subsequently the article has limited some concepts related to the enterprise human resources management informationization.

Key Code
package hr. business. entities;
public class User{
　　private int_ id;
　　private String_ name;

private String_ passwd;
private int_ employeeId;
private int roleId
User(){}
//Getter 和 Setter
public int getId()(return_ id;}
public void setId(int id) f_ id=id;}
public int getName()(return_ name;}
public void setName (int id) f_ name=name;}
public int getPasswd()(return_ passwd;}
public void setPasswd(int passwd) f_ passwd=passwd;}
public int getEmployeeId()(return_ employeeId;}
public void setEmployeeId (int employeeId) f_ employeeId=employeeId;
public int getRoleId()(return_ roleId;}
public void setRoleId (int roleId){roleId=roleId;}}

An Case

With the development of enterprises, the expansion of the scale of enterprises, how to manage employee information, extracting useful information for management, and corporate strategic decision for service has become an important issue that all enterprises face. In this case, human resources information management software becomes very important. The human resource management information system, also known as E-HR, is based on advanced information technology, integration server, network, software resources, management of enterprise data flow, to promote the level of enterprise human resource management role, raised it to a strategic level. A suitable E-HR system not only can improve the work efficiency, reduce the cost of management, standardize business processes, but also help the top decision-makers useful data to support management decision making. According to statistics, least 700/0 large and medium-sized companies in China have established a human resources management information system of their own. The human resources management informationization construction level in a company has reflected the development strength of a company at a certain extent. (Fig. 2-3)

Company D is the largest provincial branch of China Telecom. Great changes took place in the business of the company. There are more than 40000 employees located in more than 20 cities throughout the province. This presents a great challenge to the company's human resources management. This study integrated use of literature research, interview method and the methods of expert consultation in actual operation of the company, try to find the bottleneck of the HR management practice, provide guidelines for the planning and implementation of E-HR system
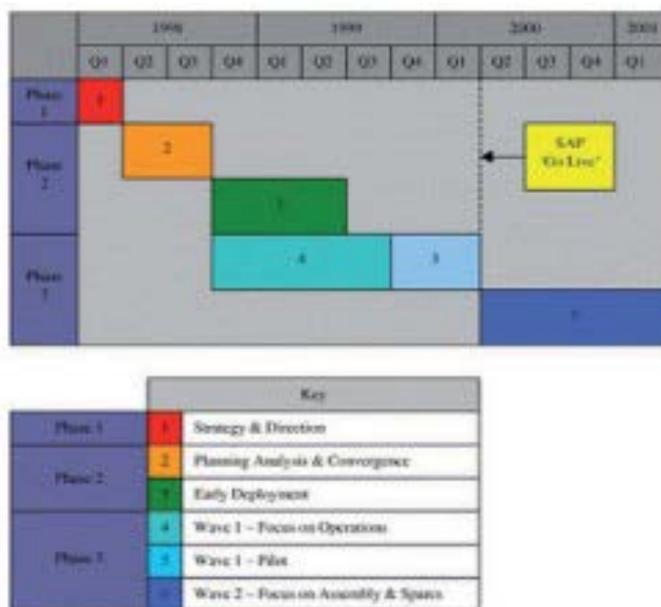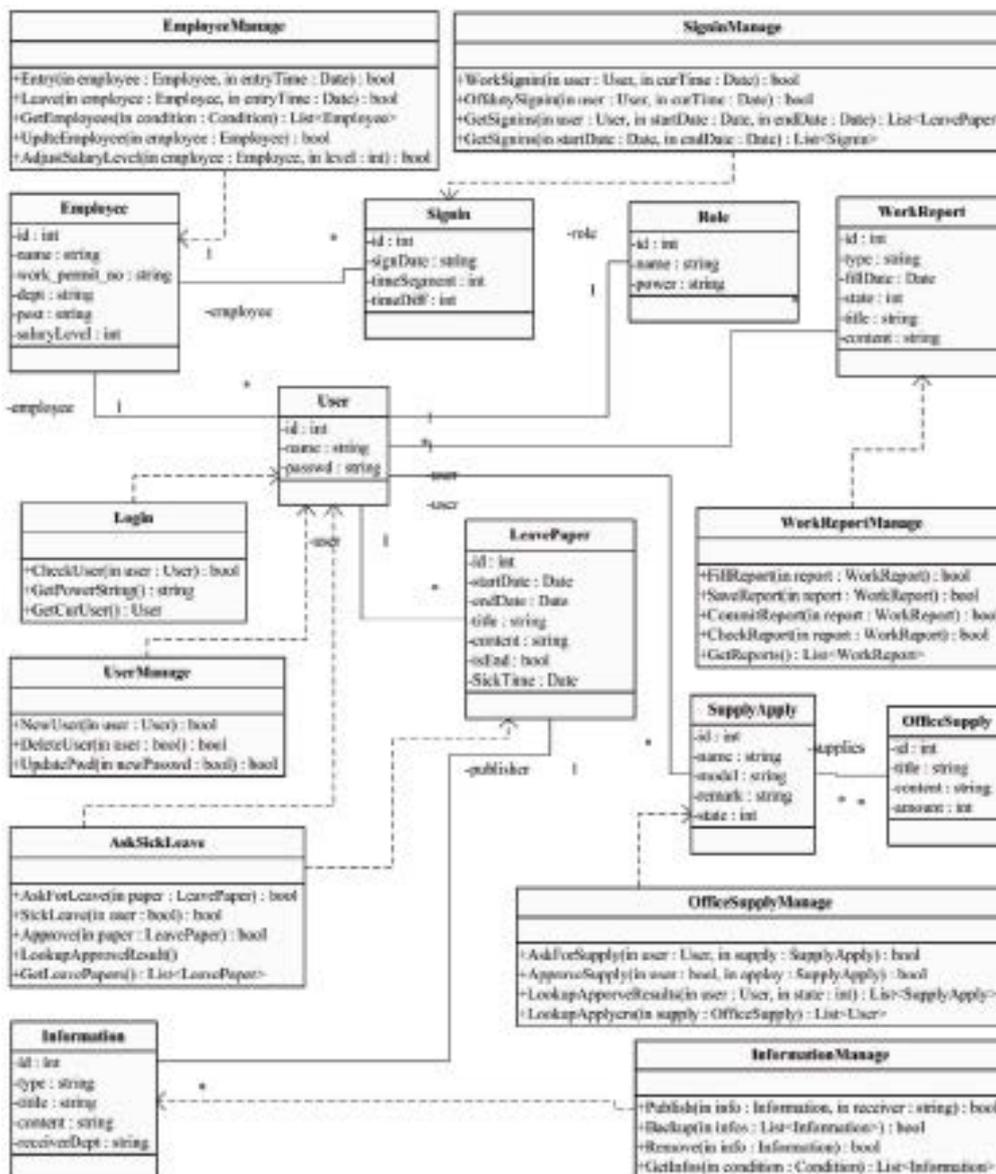
Figure 2. Implementation Model

Figure 3. Static Structure Design

for company D. Finally, through dynamic integration, responsibility partition, education training, communication mechanism, and many other aspects of the deepening research to provide the final implementation instructions. Through the comprehensive analysis of this article, we wish the company D's human resource management information system construction level can be greatly improved,

Conclusion

In this paper, system requirements analysis result is not only as the basis for software design, but also be used as software acceptance criteria. The primary goal of system design is to achieve specific business logic, to support enterprise business operation. The second goal is to meet the performance requirements to make availability be better and human-computer interaction is smoother. The system requirements analysis focuses on the functional requirements, system performance requirements and hardware and software environment constraint.

The system design includes three aspects: the system function modules, system static structure design and key business processes design. The system function module division is based on the analysis of function demand, but it is no longer for single character, but a comprehensive consideration of all roles, integrate them, reasonable design of module. The static structure of the system design, the definition of a class is divided into two kinds: the first kind is the entity class, the business entity of the class represents the system deal with the business logic in the. Second is the business logic processing class, define the business processing class corresponds to functions of each function module. Business process design reflects the dynamic behavior of the system.

Finally, system implementation is introduced, and this part includes four parts: development environments, business logic development, encryption of key information and error prevention and control. System development environment includes the system development hardware environment and development tools. The business logic realization of the system describes the realization of MVC architecture, encapsulation of data access layer using Hibernate, business layer implementation based on Struts+Spring. The encryption of key information uses the MD5 algorithm to give one way encryption for user's password information, and ensure the users password security. Error prevention and control is to avoid abnormal system operation or normal data loss, which may be brought by some controllable reasons and the user operation.

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