Design and Implementation of College Students' Innovation and Entrepreneurship Experience System Based on Deep Learning

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Abstract. Cultivating students' Set up a company leader ability is one of the main teaching tasks in universities. On the basis of encouraging teachers and students to participate in Set up a company leader teaching, students' comprehensive quality and practical ability are improved, and more outstanding talents are trained for the society. According to the actual needs in students' credit recognition of create a company, a fully functional experience system in students' create a company based on B/S structure is constructed based on Java language. According to the support vector machine of big data analysis method, the risk assessment model in students' entrepreneurship is established. At last, the functions of the system are realized by ASRNET technology, and the system is tested comprehensively from three aspects of interface, function and performance, and the errors found are corrected, so as to realize the platform and development of the whole system.

Keywords: Support vector machine · The establishment of the company · Project management

1 Introduction

With the rapid development of social environment and social conditions, today's single work is facing a very serious problem, and the social demand for college students is very strong, so it is necessary to cultivate regeneration ability and improve their self-ability to better serve the society [1]. In the current create a company experience system in students, there are some problems such as low coordination degree between departments, irregular process and weak pertinence, etc. Because the school management department lacks effective unified coordination means, it is difficult to grasp the development of create a company management in various departments in a timely and centralized manner, and it is difficult to carry out guidance work for departments; Applying information form to create a company management system in colleges and universities can improve students' comprehensive quality and core competitiveness [2]. College students need more data and ability in the process of establishing, and self-starting and company establishment can provide more employment opportunities for themselves, play the role of students in society and improve the overall skills of college students. For the development and future

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management of college students, college students should actively play their student spirit and better enter the student society to complete their historical mission. Third, use their own materials to start businesses and start businesses. Single in the whole construction and ability improvement, can play their own professional advantages, better services for the society, between the community and college students to establish a communication platform, in order to achieve the balance between the public needs, college students can provide more ability for the society, and society to provide more opportunities for college students, in order to create a better social environment, promote the overall development of society.

2 System Functional Requirements

What organizational aspects should be adopted in the analysis of the overall development and ability of Spanish doctors? First, some abilities should be evaluated, and then one point should be added to judge the implementation effect and the role of college students in society, so as to form the relationship between the two. The specific results are shown in the following (Fig. 1).

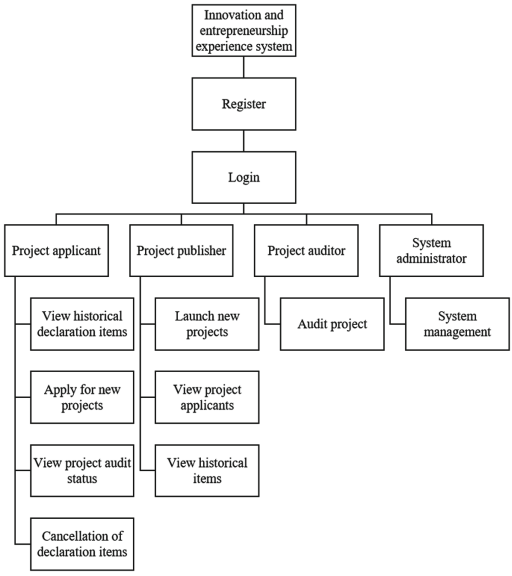

Fig. 1. Function diagram of system role

(1) Project applicant

First of all, we should set up projects for single people's ability training and entrepreneurship planning, and adopt multi-party expert review to enhance the relationship between cancer in society, so as to provide them with some reasonable entrepreneurship plans.

(2) Project publisher

Carry out the promotion of the party and employment problems, provide more reference for the employment of other college students, and realize the development of the whole employment, improve the overall employment environment and form more reasonable employment opportunities.

(3) Project reviewer and system administrator

The key issues and key contents in love are analyzed, and relevant policies and financial support are provided for the overall analysis of his life and his life employment, so as to meet the overall development needs of everyone now.

3 Establishment in Students' Enterprise Leader Risk Assessment Model Based on Support Vector Machine

In the whole analysis process, college students play an important role, but there are some shortcomings in college students, so we should make further analysis and research to meet the various needs of boys, and then provide more employment opportunities and support for college students to play their social abilities [7]. With the continuous development of machine learning algorithm, an algorithm We should play our leading role, better analyze and judge the society, form better content and realize the overall analysis of data "over-fitting" results in students.' Enterprise leader risk assessment [8, 9]. Most worried about the actual needs now, the use of analytic hierarchy process, the analysis of college students' ability and analysis of the results of judgment, through the data analysis of the key indicators and key content how to judge, if the existing problems of college students [10].

This problem is mainly to analyze the development of college students, their entrepreneurial ability and entrepreneurial conditions, to judge whether rank fighters can be carried out more accurately, to analyze various kinds of contents, to form a better environment for the overall development of his life, to provide support for the policy proposal and relevance analysis of all parties, and to improve the success rate of college students' entrepreneurship (Fig. 2).

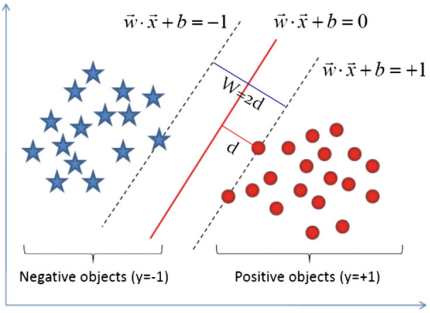

Fig. 2. Schematic diagram of classification plane of support vector machine

In the process of data analysis, it is necessary to collect the relevant data of college students, so as to analyze the attributes of the data, and then form more reasonable indicators and contents to complete the comprehensive judgment of the data, so it is necessary to quantitatively analyze the relevant data of college students.

$$y = w^T \Phi(x) + b \tag{1}$$

Sansheng's entrepreneurship analysis is not only a process, but also a multi-factor analysis result, so it is necessary to comprehensively judge the multi-factor content.

$$\begin{aligned} &\min J(w, \xi) = \frac{1}{2}\|w\|^2 + c\sum_{i=1}^{n} \xi_i \\ &s.t.\ y_i\,(w \cdot \Phi(x_i) + b) \geq 1 - \xi_i \\ &\xi \geq 0, i = 1, 2, \cdots, n \end{aligned} \tag{2}$$

In which: ξ_i represents relaxation factor; c is the punishment degree of error.

Better analysis of college students' entrepreneurial creation can integrate the problems of supporting, symbolizing and encouraging college students' entrepreneurial creation, better analyze and identify, complete the correlation analysis between data, and find out whether there are the main factors of development. And the evaluation function in students' Enterprise leader risk becomes:

$$f(x) = \mathrm{sgn}\left[\alpha_i y_i \exp\left(-\frac{\|x - x_i\|}{2\sigma^2}\right) + b\right] \tag{3}$$

The working steps of establishing college students' Enterprise leader risk assessment model by support vector machine are as follows:

(1) The indicators of safety create a company and the process of create a company need to involve more problems and the relationship between various problems, which need to be discussed in depth to make up for the corresponding deficiencies and identify and explore the problems existing in college students' create a company.
(2) To study the existing indicators of single students, find out the better correlation between indicators and put forward assumptions, and make in-depth judgment on the content of assumptions, assumptions and indicators as well as the implementation effect.

$$x_i\prime = \frac{x_i}{x_{\min}} \tag{4}$$

(3) Engineering above analysis is a systematic continuous process, so data collection should have continuity, otherwise the data collection will be in an invalid state for better analysis, it is necessary to observe the data continuously.
(4) Scattering can find the direction in the data, judge the development direction of college students' innovation and entrepreneurship, the future employment direction and the overall results of development, better enhance the employment opportunities of college students, and improve the overall development environment of college students.

(5) In the analysis of the overall development environment of college students, we should establish a more accurate model, improve college students, college students' entrepreneurship and the overall analysis results of college students effectively and better, and comprehensively judge the data to complete the continuous analysis of college students' entrepreneurship.

4 System Design

4.1 Design Principle

The system is networking and modular structure. The system adopts B/S structure and adaptive technology, and users can access and operate it anytime and anywhere through a browser such as a computer, a mobile phone or an IPAD. Modular structure is adopted in function realization, which makes the interface clear and easy to operate.

4.2 System Network Architecture

In the system network architecture, it is necessary to clarify the specific deployment environment of the system: students, administrative departments and other users send requests and access the Internet network; On the basis of obtaining the application, the system verifies the security of the access request through firewall filtering; In the process of processing the request, the basic business data is obtained from the database server, and a dynamic JSP page is formed after processing, which is returned to the user through the network, and the user receives the final processing result.

4.3 System Database Design

Database is the foundation of information system, and a database with superior quality. Play an important role. in the stability of information system. Therefore, we must pay attention to the design of database in the process of software design. When designing the database of this system, the design strategy adopted is to design locally and as a whole, and the design steps are divided into the following three steps.

(1) Design local structure

Local structure refers to a specific function, and its associated users hope to browse and process the data structure in this function. This kind of data structure is often displayed according to the user's operation authority. Therefore, when taking the function as the foothold of design, it is necessary to summarize the data of the function operation for all possible users, so as to complete the data design of function points.

(2) Integrate local structures to form the final global structure

If the local structure is adopted as the final result, it will cause serious harm to the following design: first, there is a large amount of data redundancy; second, for the same object, the attributes concerned in different functions are different, resulting in the incompleteness of object description. In view of the above design hazards, it is necessary

to integrate local structures, remove redundant attributes, merge different attributes of the same object, and establish the relationship between different entities.

(3) Review global structure

According to the different subjects participating in the review, it can be divided into user review and developer review. College student data, it is judged whether the global structure can reflect the relationship between all entities in the system and whether the attributes of each entity meet the needs of different users in different functional processing.

According to the above design steps, firstly, the E-R diagram is used as an analysis tool to analyze the data entities and their characteristics related to the system functions. College, as one of the basic data of the system, consists of four attributes: college number, college name, college leader and contact telephone number. Among them, the college number is the key attribute used by the system to identify the entity. The corresponding entity attribute map is shown in Fig. 3.

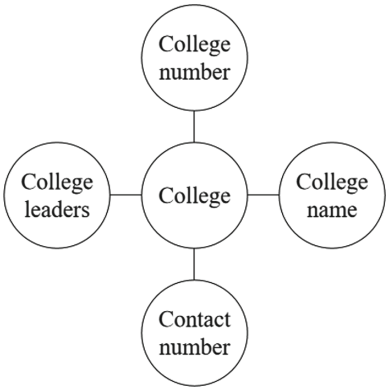

Fig. 3. College entity attribute map

As one of the basic data of the system, the specialty consists of four attributes: specialty number, specialty name, college and remarks. Among them, the specialty number is the key attribute used by the system to identify the entity, and the affiliated college is the foreign key. The corresponding entity attribute diagram is shown in Fig. 4.

As the main body of system operation, user entity contains nine attributes, which are user number, user name, password, real name, gender, contact telephone number, role, major and Email. Among them, the user number is the key attribute used by the system to identify the user entity, and its role and major are foreign keys. The corresponding entity attribute diagram is shown in Fig. 5.

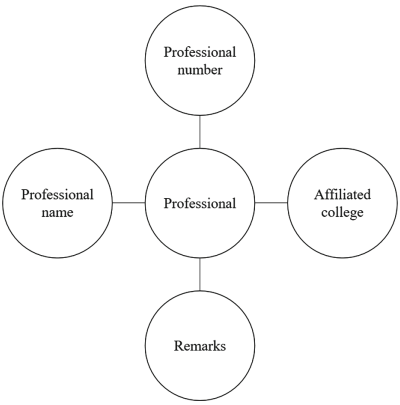

Fig. 4. Attribute map of professional entity

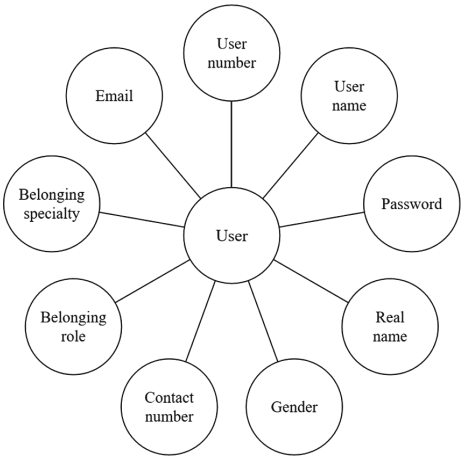

Fig. 5. User entity attribute map

5 System Implementation

In the implementation and testing part in students' create a company management system, the realization of functional modules is the primary task, and the realization results of functional modules are displayed in the form of pages and activity diagrams; Test the system from the aspects of function and performance, and make clear the system execution effect.

5.1 System Architecture

For the language in this matter vector machine, we can adopt the way of network knowledge, build modularization through corresponding websites or network support, and better develop the system. encapsulate them in the code organization structure. The

model layer, as the main part of the application, is used to represent business data or logic. The view layer adopts JSP technology; The controller uses Servlet to control user interface data display and update model layer data objects according to user input; The comprehensive judgment of obligation, the off-line analysis of data and the actual needs of college students all need to be discussed and judged by multiple indicators [11].

5.2 Realization of Process Management of Create a Company Projects

The project process management part of this module realizes the function of adding project progress, and the user fills in the information related to project progress in the page and submits it; After executing the project progress adding method addProjectProgress (), the system first encapsulates the project progress information in temporary variables, and calls the project process management control class ProcessAction to verify the project progress information.

The innovation plan management function is realized This data processing process and management process belong to a continuous process, so it is necessary to comprehensively judge and analyze the relationship between mining data, and the management department users can fill The whole information process plays an important role and role.; After submitting the innovation plan information, the system executes the innovation plan adding method addInnovationPlan (), verifies and processes the innovation plan information submitted by the user, and finally encapsulates it in the innovation plan entity class InnovationPlanBeans. Figure 6 shows the diagram of adding business activities to the innovation plan.

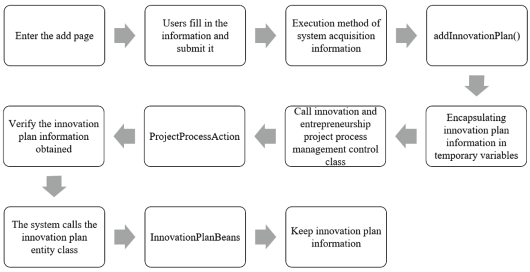

Fig. 6. Add activity diagram to innovation plan

In the innovation plan adding business, the system needs to obtain the innovation plan information submitted by the user and execute the method addInnovationPlan (). In the process of packaging and saving, it needs to call the innovation plan entity class and the create a company project process management control class ProjectProcessAction.

5.3 Project Review

Project audit is completed by the project instructor. After the students submit the project application, the teacher opens the project review list and sees the projects that have not been reviewed under his guidance. Then click the “Review” link to open the review

page. According to the description of the project, the instructor downloads the application form in the attachment, and after reading it, determines whether the project meets the application requirements. If it meets the requirements, select "Approved" in the review status, if it does not meet the requirements, select "Failed", and then fill in the review comments and submit them. The approved items will be handed over to the administrator for approval.

5.4 Project Approval

Project approval is the last pass of whether a project can be established, which is completed by the administrator. The staff first opens the project approval list and sees all the unapproved projects. The staff opens the approval page after clicking the "Approval" link. The examination and approval of the project by the staff is mainly carried out according to the examination opinions of the instructors. Determine whether the project can be established according to the teacher's review opinions and project summary. If the project can be initiated, select "Approved" in the approval status; otherwise, select "Failed".

6 System Test

Data is a systematic process, so white core and black core tests should be used in data and analysis tests to identify key points more accurately., we mainly pay attention to the function and performance of the software, and mainly test the software in black box. The system test method mainly adopts black box test, and the commonly used methods are: Equivalence class partition and boundary value analysis method. According to the non-functional requirements put forward by users, the current mainstream performance testing tool loadrunner is used to test the system performance. This chapter mainly introduces the design method of functional test cases, key test cases and corresponding test results, and makes necessary analysis on the test results.

The functional testing process of this system mainly passes manual testing without using any testing tools. In the testing process, referring to the requirement specification documents, the test cases are designed by the method of equivalence class division and boundary value analysis of black box testing. After testing, most of the functions of the system have reached the needs of users, but a small number of bugs are still found. In addition, the maximum length of the entry of "Introduction to Discipline Competition" is required to be no more than 300 characters, but when the input characters exceed 300 characters, there is no corresponding prompt in the system, which are all problems found during the test. After testing, the bug found was modified and tested again. After the second test, the system function has reached the goal required by the system requirements and basically meets the user application requirements.

7 Conclusion

Through the B/S system architecture, and the use of Web front-end development and Java background development, etc. build a database, design a college student create a company experience system, and run on the Internet to facilitate user operation; The system adopts

modular design, with intuitive and easy-to-operate interface, good concurrency after testing, and is scientific and practical. The risk assessment in students' entrepreneurship is preprocessed, and the risk assessment model in students' entrepreneurship is established by using support vector machine of big data analysis method. The designing functional modules, the class diagram and timing diagram in UML modeling language are applied and the database structure is designed. In the part of system implementation and test, the realization of functional modules and the results of system test are discussed in turn, and the main contents of realization and the final execution effect are clearly defined. In the future work, The construction of the system will improve the whole environment of college students' entrepreneurship, and provide more support to the whole college students, encourage social participation, and improve the entrepreneurial mechanism of college students.

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