

Research of the Talent Training Scheme Universities Based on Software Testing Direction

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Abstract

With the rapid development of computer and Internet, the software industry has received more and more attention, and the software testing technology has also received more and more attention. At present, there is a large vacancy of talents in this field. The talent training program in colleges and universities should keep up with social needs. Based on the current situation of the industry and the background of applied universities, this paper analyzes the shortcomings of the current talent training in the direction of software testing, and puts forward the reform measures of the talent training program in the direction of software testing in applied universities based on the actual needs of social enterprises.

Keywords

Software testing; College and universities, Talent training.

1. The Development Status of Software Testing Industry

Although the current domestic IT industry development is better, but relative to software development, software testing this area has not been highly concerned. At present, there is a large gap in software testing talents, and it is increasing year by year. In the IT industry, people still stay in the initial impression that software testing is not as good as software development in terms of subsequent development or salary. However, with the rapid development of the Internet in today ' s society, the requirement for software testing is not only to complete the traditional software testing, but also to develop towards automation and high performance. The software testing industry is booming, and the formulation of talent training programs in application-oriented universities should follow the social demand for talents.

2. Current Situation of Software Testing Talents Training in Universities

Now, most of the domestic software testers come from some college graduates or related training institutions, but the proportion of related majors in colleges and universities is relatively low. China ' s software testing industry in the development stage, with the rapid development of software development industry, high-level software testing engineers will become popular employment. Therefore, it is in line with the current social demand for talents to carry out software testing-oriented personnel training in application-oriented universities. At present, some colleges and universities have set up relevant courses, but they mainly focus on development. There is no clear understanding of the training of talents in the direction of testing. There are mainly the following problems.

2.1. Team of Teachers

Teachers do not have a deep understanding of the direction of software testing, and students cannot recognize the value of the direction.

2.2. Old Tools and Knowledge

Theory-based, less practice, students' learning enthusiasm is not high. Schools to test tools to tell the content is relatively old, the current social use of technology out of touch.

2.3. Practice Platform

Lack of a more mature practice platform, students did not get good exercise.

2.4. Knowledge System

Knowledge span is large, and it is difficult for students to form an integrated knowledge system.

3. Teaching Reform of Software Testing Talents Training in Colleges and Universities

According to the above problems in the training of talents in the direction of software testing in colleges and universities, it is necessary to continuously reform the talent training scheme and keep up with the social needs so as to cultivate talents needed by the state. In view of the lack of talent training in the direction of software testing, the corresponding reform measures of talent training scheme are proposed.

3.1. Strengthening Teacher Team Construction and Optimizing Team Structure

Teachers' understanding of the course and the teaching of the course directly affect students' mastery of software testing knowledge and their enthusiasm for employment in the direction of software testing. In view of the problem that teachers do not have a deep understanding of the direction of software testing, schools need to implement the 'school-enterprise cooperation' model, encourage teachers to use vacation time to go deep into enterprises, and exercise more in software testing technology and write experience. 'Combination of production and education', in the continuous in-depth understanding, strengthen, the teacher team gradually experienced, can stand in the social needs to state the latest situation of software testing direction, the teacher team is optimized.

3.2. Strengthening the Combination of Theory with Practice

Hiring enterprise senior software testing engineers into the classroom to bring students the latest technology and the latest industry prospects. Carry out enterprise practice project, bring the real project in the enterprise to the classroom, promote students to combine theory and practice, so as to master more solid. Enterprise test engineer and teacher team 'one to one' help, present 'double tutorial system' to regularly report to the college, help teachers to keep up with the pace of the enterprise, social progress. Strengthen 'school-enterprise cooperation', create conditions, so that students can have the opportunity to go deep into the enterprise, participate in project testing in the actual working environment, improve professional and technical ability in the actual combat.

3.3. Building a Mature Practice Platform

Practicing different projects, using different techniques, involving different testing tools, therefore, the experimental environment required varying degrees of difference. According to the project test requirements in different directions, it is important to construct different software test laboratories. Taking the mobile terminal project as an example, the test laboratory with mobile devices is first constructed, and then the corresponding hardware devices are configured according to the technology used in the project, so as to simulate the actual working environment to the maximum extent and the most authentic, and build a mature practice platform.

3.4. Building a Complete Knowledge System of Software Testing Technology

Software testing involves different knowledge of many subjects. In addition to students need to master test theory, design test plan, understand bug tracking management, write test report, build test environment, etc., also need students to master some basic computer course content, such as computer network, operation principle and application. On this basis, the teacher team design and refining, summed up the core content. Teachers team will improve teaching cases, build a rich and colorful teaching case base, and then build a complete knowledge system.

3.5. Perfecting teaching evaluation system

Software testing positions require software testing engineers to have good professional skills and display the problems found to others in the form of documents. Software testing engineers are required to have good writing and communication skills.

In the recent course performance evaluation of students, the ability to write documents should be added. Usual performance, defense, project practice, document writing and other aspects account for a certain proportion. Usual performance : can be divided into attendance, homework, stage test according to the degree of difficulty accounted for different proportions.

Answer : The quality of defense directly reflects the students ' actual mastery of knowledge, which is a very important link. Project practice : to comprehensively reflect the students ' practical ability and the ability to integrate theory with practice, it is recommended to account for more. Document writing : As an indispensable ability, there should be a certain proportion in the evaluation system. Students develop good document writing ability at the learning stage, and will not panic for document writing in future jobs.

Based on the above, a complete set of high-quality evaluation system plays a positive role in guiding students, students can more deeply understand the basic skills they need to master.

3.6. Combination of Skills and Certificates

After understanding the direction of software testing, students are encouraged to obtain relevant certificates, affix their skills, promote the examination with skills, and examine the affix skills, and promote each other. In addition to encouraging students to take more certificates, also encourage students to participate in relevant competitions, through the competition to find their own shortcomings, through the competition to play their advantages, enhance self-confidence. Colleges and universities implement school-enterprise cooperation'

Jointly hold relevant events to improve students ' learning enthusiasm and employment skills.

3.7. Morality into the Classroom

Ideological and political education is not only the main task of ideological and political courses, but also the "educating people" in professional courses. The report of the Nineteenth National Congress of the Communist Party of China clearly pointed out that moral education is the responsibility and mission of colleges and universities, which is not only the mission of ideological and political courses, but also the mission of professional courses.

"Educating people" is to cultivate talents useful to human beings, and "teaching" is to teach students scientific and cultural knowledge. Simple ' educating people ' or simple ' teaching ' does not exist. In the process of knowledge teaching, ideological education is always necessary, which is the necessity of education. Graduates should not only have higher professional skills, but also have noble personality and good moral quality. The combination of professional courses and ideological and political education, professional knowledge, throughout the semester in silent process throughout the ideological and political education. Students not only learn professional knowledge, day after day accumulation, but also improve the quality, temper the will.

4. Conclusion

In summary, the school 's cultivation of professional talents in the direction of software testing is in line with the social development trend. Based on the research on the talent training program of colleges and universities, several improvement measures are proposed. It is hoped that colleges and universities can cultivate high-level and high-quality professionals for the society.

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