

KNOWLEDGE BASED DECISION SUPPORT FOR ACADEMIA ENVIRONMENT USING BIG DATA

Mr.Baskar.R¹, Vigneshkumar.V², Subramanian.R³, Rajasundhar.R⁴

¹Assistant Professor, Department of CSE, K.S.Rangasamy College of Technology,
Tiruchengode, Tamil Nadu, India

Email: baskar.cgt@gmail.com

^{2,3,4}Students, Department of CSE, K.S.Rangasamy College of Technology, Tiruchengode,
TamilNadu, India

vvigneshkumarcse@gmail.com, sweetestmani@gmail.com, rajasundhar.rj@gmail.com

ABSTRACT: "Knowledge based decision support for academia environment using Bigdata" deals with the improvement of student's programming skills by guiding them during their Laboratory hours. It has two major modules. One works for the normal Laboratory hours and the other for the End-semester Laboratory test. The first module gives the same questions for all the students so that the best code for the given question can be analyzed and shared with all the students working for the same problem. Here students are given guidelines and references and web-links to make students solve the problem. Every students have individual login and all the performance of the students are recorded in the database. At the end of the every Laboratory hours, all the codes are analyzed

using Big-data algorithm and the best code for the session is shared among all the students. The ultimate aim of this module is to make the students code well. Apart from students login, there are staff login and CoE login. The second module focuses on randomization of questions and generating random passwords for the students. All the possible questions for the Laboratory are uploaded by the staffs. During the time of Examination, CoE enables the questions for the students which are randomly assigned to the students. Students can login using the password given to them to attend the exam. Students will not be able to any other operations in the computer during their exam till the time for the exam expires. Additionally technical news are displayed in

the web pages which makes the students to learn new technologies.

I INTRODUCTION

Practical classes are conducted in all academic courses to make the course more efficient. When the department of Computer Science and Information Technology is considered, programming skill is very essential. Laboratory hours are used to develop the programming skills. Making students to solve the problems is a complicated job for the staffs since it is not possible for a staff to help all the students of a class to code efficiently. Compilers can help students to spot the errors in the program. But spotting the error alone is not sufficient for a beginner programmer. Students learning new programming language need more guides to code properly. When a problem is being solved by a student, finally they should know the best solution for that particular problem so that they can develop themselves. When a problem is solved by a student, it should be stored or saved for future references which is not properly done in the current system. Further in the end semester examination, questions are pinned in the sheets and provided to the students. This may lead to

cheating by the students. Considering all these, a system should be created to overcome the drawbacks.

II EXISTING SYSTEM

Laboratory exercise are conducted with the questions provided in the Lab manual. The students are allowed to code in the local machine. The programmers are not saved for future reference. The program written by the students are analyzed manually by the staffs. The Laboratory exams are conducted only to analyze the skills not to develop it. Efficiency of the program is not completely checked. The efficient program is not shared or made available to the students. During the end semester examination, question is pasted in the answer sheet. There are chances for cheating in the end semester examination.

III PROPOSED SYSTEM

Questions are made available to the students only at the time of Laboratory hours. The program summary is given to the students at the end of the lab. Hints are given to the students to search in the internet to solve the given problem. It leads to efficient programming. Errors are spotted correctly. Cheating is avoided during the

end semester. Questions are not repeated to the nearby students. The program written by the students are automatically stored in the server. Technical information are shared in the WebPages to make the students technically aware of the new technologies.

IV WORKING CONCEPT

Algorithm is used to select the questions randomly from the server. Randomization algorithm is use to generate passwords to the students. The selected question is displayed to the students at the time of Exam or lab hours. Hints are provided to solve the question during normal lab hours. The program is checked for the errors from in the local compiler. The program is stored in the server automatically

V CONCLUSION AND FUTURE WORK

Thus, the project entitled as "Knowledge based decision support for Academia environment using Big data" is brought up with the idea of helping the students to develop their programming skills. When a proper guidelines are given at the beginning of the development, one can achieve the goal with high probability. With the given hints, students can be able to develop their efficiency to code. With the

additionally given technical news, they can be able to know more about the new technologies as well as the old one. During semester, this system makes the staffs to have less work and concentrate more on the students and to analyze them. In future work, Artificial Intelligence can be included in this system to make this system even more efficient.

VI REFERENCES

- [1] Shalini Jain, Satendra Sonare, Ashok Verma(2015), "Big Data Analysis using HDFS C-MEANS and Mapreduce". International journal of Advance Research in Computer Science and software Engineering, IEEE, vol.5, issue.4
- [2] Kyong-Ha Lee Yoon-Joon Lee, Hyunsik Choi Yon Doh, Chung Bongki Moon(2011), "Parallel Data Processing with Mapreduce". SIGMOD, vol.40, no.4
- [3] Arun.K, Dr.Jabasheela.L(2014), "Big Data: Review,Classification and Analysis Survey". International journal of innovative research in information security, vol.1, issue.3

- [4] Ming Liu, Rafael A. Calvo and Vasile Rus(2006), "Automative Question Generation for Literature Review Writing Support". International journal of Advance Research in Computer Science and software Engineering,IEEE, vol.8, issue.2
- [5] Ashok Immanuel, Tulasi.B(2015), "Framework for Automatic Examination Paper Generation System" IJCST, Vol. 6, Issue. 1.