Abstract

A novel framework to evaluate computer programming labs is proposed. The primary focus is fair and effective evaluation of programming labs. The proposed framework includes a user friendly interface for instructor to detect cheating and evaluate submitted programs. Every submitted program is first checked against predefined test cases. If the program passes through test cases, then it is checked for plagiarism. Finally, the program is checked for performance. An efficient and novel approach to evaluate performance of submitted programs is proposed. The computational complexity of the submitted programs is evaluated using control flow graph of the submitted program.
Control Flow Graph based Framework for effective Evaluation of Source Code

- Facebook Hacker Cup. http://www.facebook.com/hackercup
- TopCoder, Inc. | Home of the world’s largest development community. http://www.topcoder.com
- GCC, the GNU Compiler Collection. http://gcc.gnu.org/

Index Terms

Computer Science

Information Sciences
Keywords
Student Evaluation  Plagiarism  Program Comprehension  Static Code.