St. Bonaventure University
High School Programming Contest
2014 Announcement

Competition Date: Friday, March 21, 2014

For the past twenty-five years St. Bonaventure University's Computer Science Department has hosted a programming contest for high school students. Originally the contest attracted schools in Western New York and Northwestern Pennsylvania. Over the years the contest has grown and teams have traveled to Bonaventure from a wider area. In addition to schools from Buffalo, Rochester, Ithaca, Pittsburgh, and Erie, schools from Ohio, Delaware, Virginia, Maryland, and even California have participated. The contest provides an opportunity for students to demonstrate their programming skills in a competitive environment.

The contest will be held on the St. Bonaventure University campus on a Friday, March 21.

A faculty advisor must accompany each team from their school. St. Bonaventure University covers the cost of all materials and meals. The only cost to participating schools is transportation to and from the campus. Participation is restricted to 20 teams and participants are selected on a first-come, first-served basis. Teams must register for the contest by March 7. Schools will be sent more detailed information regarding the computer facilities, contest rules, and sample contest problems once they have registered.

Check-in for the teams begins at 8:00 a.m. and the orientation begins at 8:45 a.m. The final awards presentation will be completed by 2:00 p.m. Team awards will be presented to the 1st, 2nd, and 3rd place teams. A large "traveling" trophy, donated by Metrowerks, can be kept for one year by the team that finishes first. The Dalton School from New York City took home the trophy last year, but it will up for grabs again on March 21st.

The contest is conducted in computer laboratories located on campus. All the laboratories contain Windows7-based personal computers that are linked by a campus-wide local area network. Teams use the network to submit their programs.

A team consists of no more than four students from the same high school. Students may only program in Java. Each team receives the same collection of 7-9 problems. Scoring is based on how quickly each team submits correct solutions.

The Eclipse development environment is used during the competition. The programming environment is pre-configured with the projects for the problems so that minimal knowledge of the Eclipse environment is required of the student programmers.

A professional development workshop is conducted during the contest for faculty advisors. The topics covered in the workshop vary from year to year.

Most of the contest problems require a team to write a complete program that meets given specifications. Some of the contest problems will require the students to write a program that uses a pre-defined class that we will provide at the time of the contest. (Problems of this type have appeared in the contest the last several years.) Instructions for practicing with class-based problems are available at the contest web site.

Still other problems are designed to emphasize the importance of complete testing when writing programs. More specifically, these testing-based problems will present students with a specification written in the same format as more traditional problems. The students will also be presented with a web page that features an applet that runs a partially correct solution to the problem. It is up to the team to find an input data set such that the program on the web page does NOT generate the correct answer for their input. Teams are responsible for providing the correct answer for that input data as well. Some sample testing-based problems are now available.

REGISTRATION: To register a team for the competition, please send an email with your contact information to Steven Andrianoff, contest director.

Please register no later than Friday, March 7.