College of Charleston Ver 2007.1.1

ACM

The 2007 High School Computer Programming Competition

Produced by:

The College of Charleston Student Chapter of the Association for Computing Machinery (ACM)

Sponsored by:

The Computer Science Department
Benefitfocus.com, Inc.
Automated Trading Desk, LLC

Co-Located:

The College of Charleston Department of Mathematics
MATHMEET 2007

Contents:

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Motivation

For the 2007 competition, the College of Charleston student chapter of the ACM decided to introduce a new approach that changes the competitive philosophy and the implementation of the event.

The new approach in philosophy is that we will focus on the quality of the submissions from the competing teams and remove the fastest-to-complete constraint entirely. The state of the practice and the state of education in software engineering emphasize quality. We are focusing on both technical quality and artistic quality. The technical quality refers to objective evaluations of how well the submitted solutions match the stated requirements. The artistic quality refers to subjective evaluations of the organization of the code, the readability of the code and its documentation, as well as the readability of the output files, for example.

The new approach in implementation is that we want to prioritize the fun aspect of competition and to create an infrastructure that promotes team success. To this end, we are providing working skeleton programs for each problem. These programs demonstrate input and output functionality with exemplar files. The teams will solve each presented problem and introduce their solution into the supplied program. Each problem description will also direct the teams to provide test inputs and outputs as well as documentation for their solution. We will provide a “Syntax-Master” to answer publicly questions relative to program syntax.

This is an experimental approach and we seek your support and ideas. We will evaluate the experience afterwards and possibly report these results to the ACM for their consideration concerning the international collegiate programming competition.

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Schedule of Events for 23-24 Feb 2007

23 Feb (Friday), please refer to MAP on next page

4:30 – 5:20 Check-in: (bring registration FORM) Teams arrive and assemble at the JC Long Building room 220. Teams will be assigned workstations and introduced to the competition environment.
5:20 – 5:30 Teams and ACM members walk to Stern Center for dinner
5:30 – 6:45 Dinner at Stern Center for Students:
- Welcome by Dr. Chris Starr, Chair of the Department of Computer Science;
- Competition Stories by Steven "Bubba" Robbins of BenefitFocus.com;
- Presentation of Rules with Q&A session

5:30 – 7:00 Dinner at Craig Café for Faculty, Team Advisors, Spouses and Children (Cafe is located between JC Long and Stern Center)
7:00 – 7:15 Return to JC LONG 219 for Faculty Lecture and Judging

6:45 – 7:00 Teams walk back to JC Long 220 and prepare to start competition
7:00 – 9:30 - C O M P E T I T I O N

7:15 – 8:15 Dr. Renee McCauley (CofC) presents to Advisors and Faculty: "Research in Teaching and Learning Programming" (JC Long 219)
8:30 – 10:00 - Judging by Faculty in JC Long Lab 218

24 Feb (Saturday), please refer to MAP on next page

3:15 – 5:30 Awards Ceremony at Sottile Theatre

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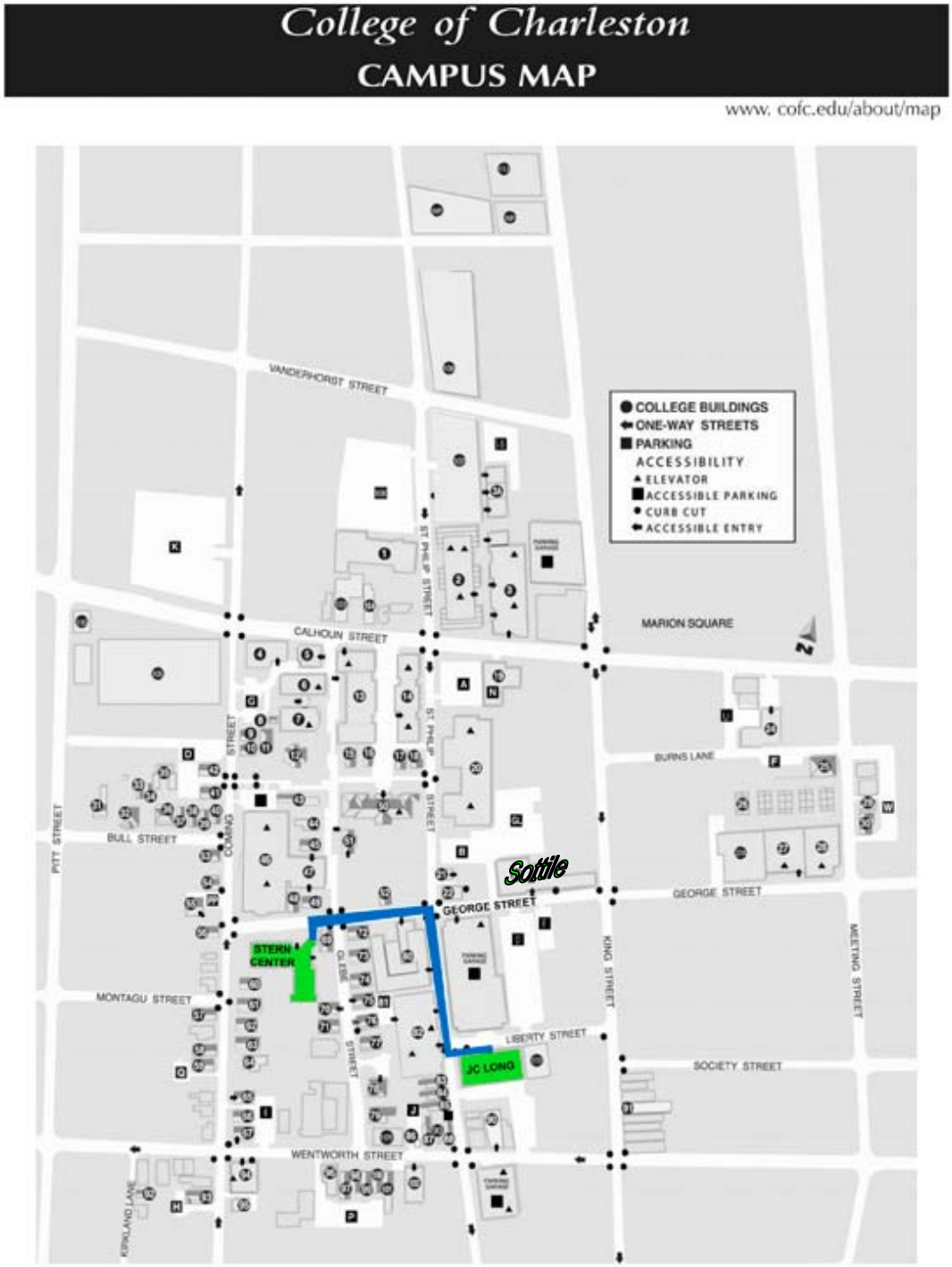
BENEFITFOCUS

Map of Venues:



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Competition Rules

1. General
    a. Teams will have no more than three members.
    b. The ACM will assign each team a work area, at least one computer, and a **specific private network folder TEAM-1, TEAM-2, etc.,** containing resources and for their deliverables.
    c. Teams may bring books, notes, and electronic storage devices such as jump drives, CDs, and DVDs.
    d. Teams may not bring laptops, PDAs, cell phones, and other similar electronic devices to the competition.
    e. Teams may not bring food or drink into the competition rooms. The ACM will provide snacks and drinks in the hall outside these rooms.
    f. Teams may not access the Internet, including the WWW or Email, etc. during the competition. Teams may consult only ACM members or the Syntax-Master during the competition.
    g. A printer is available for use during the competition. Teams should request that an ACM member retrieve their document for them.

2. Competition
    a. The ACM will provide each team with a Python interface called "IDLE."
    b. The ACM will provide each team with the problem specifications in a public folder "**ACM-PROBLEMS\PROBLEM-1**," for example. This brochure, as well as supporting documents will be available in a public folder "**ACM-RESOURCES**."
    c. Each problem will consist of a problem statement, a solution specification, and a working skeleton program.
    d. The ACM will provide a person known as the "Syntax-Master" who will answer questions about syntax in Python.
    e. Teams will create solutions in folders named "**TEAM-#\PROBLEM-1**," etc. as specified in each problem statement.

3. Scoring will be based on technical and artistic merit as illustrated by the following lists:
    a. Technical Merit based on how well a team (or team's)
        i. Followed instructions correctly
        ii. Program passes judges test suite
        iii. Input file covers the judges' test suite
        iv. Output file conforms to specifications
    b. Artistic Merit based on how well a team (or team's)
        i. Documented their solution
        ii. Program is readable
        iii. Solution has conceptual integrity

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Prizes:

Each of the first four teams will receive a trophy.

Each member of the First Place team will receive an
Ipod Nano 2GB

Each member of the Second Place team will receive a

Cruzer Micro 1 GB USB Flash Drive

Good Luck Teams !!!

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Final Registration

*** * * Please fill out this form and bring it with you to check-in on 23 Feb. * * ***

School	**Name:**	_____
Team	**Name:**	_____
Advisor	**Name:**	_____
	Telephone:	_____
	E-mail:	_____
Student 1	**Name:**	_____
	E-mail:	_____
Student 2:	**Name:**	_____
	E-mail:	_____
Student 3:	**Name:**	_____
	E-mail:	_____

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Resources for Teams

Python and IDLE are available at http://www.python.org/download/ .

Python Tutorial at: http://www.hetland.org/python/instant-python.php .

College of Charleston Department of Computer Science Python Intro
is available at: **http://www.cs.cofc.edu/~acm/hscomp/PythonIntro.pdf .**

The Python programs that illustrate the Python Intro
are available at: **http://www.cs.cofc.edu/~acm/hscomp/PythonPrograms.zip .**

This brochure is available at:
http://www.cs.cofc.edu/~acm/hscomp/CofC2007_HS_Prog_Comp_Details.pdf

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