2012 IUPUI Computer Science Day: How Can You Make Your Impact?
Friday, March 16, 2012 • IUPUI Campus Center

REGISTER ONLINE: www.science.iupui.edu/computerscienceday
Registration Deadline: March 9, 2012
Space is limited!

Students: Teams of two compete in one of three categories. Each team member must register online and provide a team name or the name of your partner. If you do not have a partner, you will be assigned one.

Programming & Problem Solving Contest Guidelines
Ready to test your skills and solve a series of progressively more difficult brain teasers? This contest is for you! Pair up with your partner and puzzle through a series of challenging programming problems. Teams will use Java, C, or C++ to solve these problems, requiring discussion and collaboration with their partners. The contest scoreboard will be up during the competition, so you can see how your team compares.

Programming Knowledge: Students should have a working knowledge of the fundamental data types and programming, and be able to use these languages proficiently in order to be competitive in this contest.

Part One: Setup & System Check
Log in to your computers, check your configuration, and learn about scoring and the contest from the contest moderators.

Part Two: Contest
Get set and go! Use your time wisely and collaborate with your partner to work through a series of 10 or more computing challenges. Solve them in sequence or out of sequence for points toward your big win.

Part Three: Conclusion
Contest wrap-up, scoreboard check.

Web Development Contest Guidelines
So you think you can Web? Bring your technical prowess, your design skills, and a sense of humor to this content -- you will interact with that “always right” customer, fight through technical issues and be challenged by production problems. See if you can meet the challenge of delivering a best in class web site under real world conditions! The goal of the contest is publish a production ready Web Page to a host server.

Programming Knowledge: Students should have some knowledge of HTML. To make technical content more visible, the development toolset is constrained to “low-end” editors such as TextWrangler or Notepad++. Each team will be assigned a technical advisor from the Computer Science Department support staff.

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**Web Development Contest Guidelines continued**

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<td>Interact with a customer to understand site requirements. Then create and present an electronic wire frame and mini-project bid to the customer for approval.</td>
<td>Create HTML files, CSS files and a production directory structure on the CSCI contest server. Teams will document and follow a site test plan, respond to initial customer feedback and deliver a product upgrade.</td>
<td>Judging &amp; contest de-brief</td>
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**Website requirements:** Develop website using progressive enhancement. Website must be XHTML strict compliant. Sites must include at least one HTML5 and CSS3 feature. Development must observe configuration control. Sites must follow basic user interface principles. At a minimum, sites must include the following HTML content: Image, list, link, meta data, Link, Static Form, Table, and Image Map. At a minimum, sites must include the following CSS content: Font, inheritance, div, class, layout and image manipulation.

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**Game Programming Contest Guidelines**

Are you a gamer? Spend your time with the Kinect, Wii, or PS3? Create your own games that you can play today! Student teams will learn how to use Scratch (from MIT) to build a game based on a topic to be announced during the contest. (Participants will not be permitted to connect to the Internet during the contest, but Scratch does have an audio and image editor built in. If you wish, you can bring your own headphones and microphone for audio.)

**Programming Knowledge:** No experience is needed to begin developing your own games. If you have experience with web development or programming languages like Java, C, or C++, the other contests will be better suited for you.

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<td>Teams will learn how to use Scratch—a free tool called used to build games and animations.</td>
<td>Topic announced and each team will have two hours to build a game based on the topic.</td>
<td>Judging &amp; contest de-brief</td>
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**Scoring will be based on the following criteria***:

**Game Mechanics**
- Introduction (5 pts)
- Help / instructions (5 pts)
- User control (5 pts)
- Autonomous sprites (enemies, powerups, whatever) (5 pts)
- Collision management (5 pts)
- Scorekeeping (5 pts)
- De-briefing (5 pts)
- Documentation (5 pts)

**Game Play**
- Code organization (neatness, named objects, use of message-passing to organize code) (10 pts)
- Implementation of the theme (10 pts)
- Quality and originality of graphics (10 pts)
- Use of sound (10 pts)
- Play balance (difficulty or ease of playing) (10 pts)
- Overall impression / originality. (10 pts)

*Judges will have some discretion. For example, an archery game may not require moving sprites that are not under the player’s direct control, but the judge could choose instead to use these points to reward the mechanics of an arrow that follows gravity. Such exceptions should be clearly marked on the rule sheet.*