



Infotech Niagara Student Programming Competition 2011/2012 *Earth Clock*

First Prize: \$ 1,000

Goal: To produce a fully functional **Earth Clock** app or interactive website- which will show via text and illustrative graphics - depleting and emerging energy resources, increasing and decreasing disease strains, deforestation and new growth, glacier activity, ice movement, shoreline changes, population changes, species extinction and discovery, and any other parameters of global concern, of which there are many.

Rules & Parameters: The program must be fully functional and complete, and must draw on common and public sources of Internet-based data. The App must run on an Android, IOS (Apple), or Windows Mobile device or be a website that will run on a standard browser. It should have text, map-based, and chart versions of all data. The graphics should be full-colored and use the target device's maximum resolution. The data changes must be real time and current. All source code must be original. Any programming language, scripting tool, or graphics format is acceptable.

- 1) Teams will be comprised of 2 (minimum) to 4 (maximum) members.
- 2) Applications will be available on the Infotech Niagara website. Applications open as of Nov. 1, Team names must be submitted by midnight Monday November 21, 2011.
- 3) Team members must be undergraduate or graduate students at a New York State educational institution.
- 4) It is highly recommended that teams be comprised of multiple academic major disciplines.
- 5) **Entries will be judged upon the following criteria:**
 - a) Technical merit (25%)
 - b) Innovation and creativity (20%)
 - c) Usefulness (25%)
 - d) User Interface/design (25%)
 - e) Technical write up that details the team's technical solution (5%)
- 6) The premise of the competition is to create an Interactive Website or App that will determine a future fixed point in time when the earths' resources will be depleted and unable to support life.
- 7) Technical merit: The website/app should be user friendly for anyone in the general public. It can use any form of website design and creation that allows for multiple inputs and produces a future date output. Flexibility of the inputs will be important to allow for factors that may extend or reduce Earths' resources. Experienced computer and information technology judges will examine the nature of the website/app creation and its interfaces. Plagiarism will be cause for disqualification.
- 8) Innovation and creativity: The website/app should be attractive and colorful. The inputs should be extremely user friendly. The design of the website and the programming involved should create a unique look. The details of the inputs (i.e. using interdisciplinary team members) should create an Earth Clock that can identify a large number of inputs.
- 9) Each team will be assigned a mentor to help guide the team through the process.
- 10) The competition runs from November 1, 2011 thru January 31, 2012.
- 11) Upon completion, team websites or app information & technical write up should be emailed to Holly Justice (hjustice@buffalo.edu) no later than midnight January 31, 2012.

If you have questions, you are welcome to contact Holly M. Justice at hjustice@buffalo.edu



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Contest Application (Open as of Nov. 1, deadline is midnight Monday November 21, 2011)

1. Team Name: _____
2. List of Team Members (including full name, email address, School & academic major)
3. Please be prepared to provide the following information to your assigned mentor:
 - Intended target system – Android, IOS, or Windows Mobile or website
 - A one-paragraph description of your system giving its high points