

## CS 106A Graphics Contest

### Submission deadline: 11:59pm on Friday, March 10th

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Based on a handout by Eric Roberts

The graphics programs you write using the **acm.graphics** package tend to be more exciting than the console-based programs you wrote in Assignment 2. The Breakout and Hangman games—exciting as they are—only scratch the surface of what you can do with the graphics package. To give you a chance to explore the capabilities of the package in greater depth, we are pleased to announce the CS 106A Graphics Contest. Note that this is a purely optional contest, so you should not feel obligated to enter if you don't have the time. It's really a chance to let you show some more creativity in working with features of the graphics package and showcase some of your programming skills if you so choose.

Each of you is eligible to submit one entry for the contest, where an entry consists of an original program that uses the **acm.graphics** package. You are free to use any of the capabilities in those packages (including animations, mouse and keyboard listeners, interactors, and even capabilities described in the course textbook and **javadoc** even if they have not been covered in class). You may not, however, display anything on the window that does not come from one of the classes in **acm.graphics**, as discussed below in the official rules.

#### Selection criteria

The entries will be judged by the CS 106A staff (see official rules below), and a prize will be awarded in each of two categories:

- *Aesthetic merit.* This prize is awarded based on the aesthetic value of the graphical images and/or animations produced.
- *Algorithmic sophistication.* This prize is based on the difficulty of the underlying programming task and the sophistication of the displayed images.

In both categories, programming style will be part of the evaluation (so don't submit horrendous code), but the functionality of your program will be the most important aspect for judging. Please note that you don't have to specify a category; all entries will be eligible for either prize.

#### Prizes

There are two grand prizes in each of the categories. If you win a grand prize we will replace whatever individual score most negatively affects your grade—which may be an assignment, the midterm, or the final exam—with a 100% in the computation of the final grade. (Note: that means that as a contest winner that you could choose not to take the final exam and you would get a 100% on it, since by not taking the exam, it would be the score that would most negatively effect your grade). In addition we will reward serious contest entries with runner up prizes which are

*Official contest rules on back of page*

**Official rules**

1. Only students registered in CS 106A are eligible to submit entries in the contest.
2. Only **one** entry per person will be accepted.
3. All entries must be submitted electronically using Eclipse's submit facility by 11:59P.M. on Friday, March 10th. Late entries will not be accepted, and you **cannot use late days** for the contest. In addition to submitting your code electronically, please also send an email to Chris ([piech@cs.stanford.edu](mailto:piech@cs.stanford.edu)) and Nick ([troccoli@stanford.edu](mailto:troccoli@stanford.edu)) informing them of your contest submission so they can make sure to keep an eye out for it.
4. You are required to do all of your graphical operations using the classes from **acm.graphics**. Thus, you may not dig into the official Java documentation and come up with some other way of displaying graphics or user-interface tools such as buttons and scrollbars. For example, it is also illegal to override the **paint** method in **GObject** and to implement your own style of graphics that way.
5. Contest entries should be sensitive to Stanford's individual and cultural diversity. Programs or narratives that have the effect of perpetuating negative stereotypes will not be considered for prizes.
6. Contest entries will be evaluated initially by Chris and Nick. The best entries will then be judged collectively by the section leaders, who will choose the ultimate winners in each category. Winners will be announced in class during the last lecture in CS106A (Wednesday, March 15th).

**Starter Project**

To get started with your contest entry, you should download the **Graphics Contest Project** available from the **Assignments** page of the CS106A website. You are free to modify this starter project however you wish, as long as you remain within the rules of the contest.