CS 1301 HW 10 – Robot Performances

Performance date: Tuesday April 14th, 2009

Performance time: 4:30-6:30pm

Performance Location: The Atrium of the Christopher W. Klaus Advanced Computing Building (#153 on campus map)

T-Square Submission Due Date: Wednesday April 15th before 6pm

Your group's task is to create a performance showing off what you have learned this semester. It can be an acting sequence, dancing sequence, Armageddon-inducing battle sequence, scene from a show or movie, or whatever. It must follow these simple, bite-size, easy-to-follow guidelines:

- Everyone and their kid brother (robot) must be involved. Involvement can be creating music in the background, moving scenery around, etc., but each robot MUST be running code simultaneously.

- The robots should be synchronized. Timing should be as close as you can get it. This can be accomplished a number of ways; for example, you can have each program ask for input as the first line of code (Press enter when ready to start! The currentTime() function can tell you how much time has passed since the "Go" button was pressed.), or you can have the robots/laptops communicate with each other in some way.

- Nothing inappropriate for school (bad language is a no-no).

- Your performance must include movement and sounds, such as beeping, speaking, or music.

- Dress up your robots! Construction paper, ribbons, and colored tape all work well.

- The performance must be between 30 and 75 seconds long.

Other suggestions (not required, but useful):

- A set (scenery, props, etc.).

- Audience input (story direction, which robot won the competition, whatever). Time spent waiting for input does not count towards your time limit.

- Dynamic performances/use of sensors – have the performance do something different based on its surroundings, or have a random element to your performance. (Note: if you use light sensors, make sure you test your code in the performance room at the appropriate time of day beforehand; reflections and glare have been known to have an impact)

Format:
You will have a 10' by 10' performance area (stage, set, theater, arena, scaffold, stadium, etc) to work on. You can start anywhere within this grid and move however you like, but we suggest you try to stay within the grid to avoid the feet of observers.

What to turn in:
Each person should turn in two files to t-square.
The first file will be named <firstname>_<lastname>_program.py. Where <{first/last}name> is replaced with your name. For example: jay_summet_program.py if your name is Jay Summet.
This file will contain the program that your robot ran.
The 2nd file should be a text file (you can create a text file using Notepad or Wordpad, or via MS Word, Save As...Text) called **group_evaluation.txt**
In this file, you should list:
1. Your Name
2. The names of your other team members
3. A list of the items/work you did on the performance
4. What percentage you think this was of the total work your team did.
5. For each of your team members, you should also report:
   - Their name.
   - A list of the items/work they did on the performance.
   - What percentage you think that was of the total work your team did.
You may also include any other notes you think we should consider when giving out grades.
You will primarily be graded on the performance in the workshop, although some points will be assigned based upon the program you turn in and the group evaluation files your teammates turn in.

Grading – 200 points total:

  Group – 125 points:

  - 50 points: Performance is successful (no restarts or adjustments mid-performance) and fulfills guidelines

  - 75 points: TA grading sheets (see attachment)

  Individual – 75 points:

  - 5 points: File named correctly, has correct comments at the top

  - 20 points: Program accurately reflects performance

  - 50 points: Team evaluation

Extra Credit

- 25 points: TA Choice award

- 20 points: Instructor Choice award

- 10 points each: Best Props/Scenery, Best Sound, Best Costumes, Most Convincing, Most Amusing

TA Evaluation Sheet - Robot Team Performance
Team Number/Name:_____

Check offs: Longer than 30 sec __ Less than 75 sec __ Involved all robots __
Obviously and correctly synchronized_____ Sound effects_____ Costumes ____
Ratings:
5 = Excellent 4 = Good 3 = OK 2 = Fair 1 = Poor
We expect that few teams will receive Excellent marks. Give them out only when a teams performance in one of the following categories was definitely outstanding. Many teams will do Good or OK in most categories. Fair and Poor ratings should be given when you feel that the team did not put much effort into that aspect of their performance.

Creativity: 5 4 3 2 1

How creative was the performance itself (not counting decorations & set)? Did you expect to see something like this performance before you heard about it?

Technical Difficulty: 5 4 3 2 1

How difficult was the performance to achieve? Did the robots have to have split second synchronization to achieve the performance? Did the robots pass close by one another without colliding? Did you ever wonder "How did they do that?"

Entertainment: 5 4 3 2 1

How entertaining was the performance? Was it of an appropriate length so that it did not get boring? Did it bring a smile to your lips?

Decoration: 5 4 3 2 1

Were you impressed by the robot's costumes? The set and props?

Style: 5 4 3 2 1

How well did the different robots work together? Did the performance look like a seamless whole, or were the different robots each doing their own thing? Did all of the decorations (costume / set / props) match in theme and style?

Total: _____