CS 1301 Summer 2013 HW 8 - Exhibition Wed July 17th

Team project: Exhibition! (200 points)

We will be producing an exhibition in the Klaus building Atrium during our workshop time period.

You and your team will program your robots to perform! Your team can pick the exact type of performance (dance routine, choir group, circus act, acting out a scene from your favorite TV show, Movie, or play, etc) as long as it **meets the following guidelines:**

- All team member's robots must be involved. Involvement may include moving and/or backup activities such as narration or vocals (speak(), music, beeps?), or manipulation of the set.
- The robots should be synchronized. Although they may be doing different things, they should be doing them in the correct order and with appropriate timing. You may synchronize your robots by having the first line of your program ask for user input [input("Hit Enter on all laptops at the same time when you are ready to go!")]. After that, you may want to use the currentTime() method to make sure that all robots are synchronized.
- Content must be appropriate for school (beep out naughty words!)
- Your performance should include movements, plus some type of sound effects. Sounds may include music, beeping, or even speaking with the "speak()" function.
- Your robots should be appropriately costumed. You may use tape, colored paper, rubber cement, lights, tassels, cotton balls, pipe-cleaners, etc to decorate your robot appropriately. It is suggested that the costume be removable when the performance is over, but if you want to spray paint your robot we can't stop you!
- The performance must be a minimum of 30 seconds in length and a maximum of 75 seconds in length.

Optionally you may want to:

- Construct a set with props for your robots to interact with (background? ramps? doors?) you could even have one robot controlling parts of the set or props.
- Ask for audience participation. You may pause the program(s) at some point and ask the
 audience to to make a choice in how the story/performance should evolve. (You press the
 appropriate number/letter on the laptops based upon what the audience says.) Paused time
 for audience feedback/choice will not be counted against your 30-75 second limits. For
 example, this could be used to implement a trivia game where the audience helps the
 robots play.

Format:

Your "stage" will be a 10ft by 10ft square marked with masking tape on the tile floor of the KACB Atrium. Your robots can start anywhere in the grid, and move anywhere in the grid (they are free to move however they wish) but should attempt to stay within the maze grid to avoid the feet of audience members.

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.

Group Grading - Total of 125 points:

25 points - Performance is successful, without technical problems that require a re-start or extra work.

25 points - Performance met all of the required guidelines.

75 points - Based upon TA grading sheets (see attachment.)

Individual Grading - total of 75 points:

5 points - <FIRSTNAME>_<LASTNAME>_program.py file has correct name and header with student name, email and collaboration statement.

20 points - The program accurately reflects the performance given in the workshop.

50 points - Based upon your team members' evaluation.

Extra Credit:

TA Choice Award(s) - 25 points Instructor Choice Award - 20 points

TA Evaluation Sheet - 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: