CPSC203 – Introduction to Problem Solving and Using Application Software

Winter 2010

Tutorial 8: Mehrdad Nurolahzade

Programming Project

- Groups will be working in the lab on their projects and I'll be here to answer questions and provide guidance.
- The project requires more work than 2:30 hours of allotted lab time.
  - Utilize the CT hours (the schedule is available on the Wiki)
  - Work at home
- Project due date is Friday, April 16, 11:59 pm.

Programming Project

- Your movie must consist of a minimum of **four scenes**.
- If your scenes require different backgrounds, you may implement them in different a2w files.
- The complete movie should be a minimum of **three minutes** long.
- Each scene must have a random (surprise) element.
  - The characters will take different actions, using programming constructs, based on the random element.

Programming Project

- There can only be a maximum of **30 seconds** of dialog between characters that is not accompanied by any other activities.

- You also need to submit the flowchart of your project.
  - There should be a separate flowchart for each method in the movie.
  - Flowcharts must follow the notation used in class/text.

Deliverables

- The flowchart of the entire movie.
  - Each method should be in its own flowchart, starting with the *world.my first method*.
  - The flowcharts should show if actions were to be run sequentially or in parallel as shown in the Alice lab manual. In addition, loops, conditional statements, etc. should be apparent.
- A zip file containing your a2w file(s) and sound files used in the project.

Grading

1. Coherence: Objects should not suddenly appear and disappear, and there needs to be a smooth transition between scenes. (5 points)
2. Consistency between flowcharts and code. (10 points)
3. Modularity (25 points)
    a) Appropriate use of class level and world level methods and functions (5 points).
    b) Methods/functions should be of a small size. (5 points)
    c) Appropriate parameters should be used (5 points).
    d) Appropriate division into scenes. (5 points)
    e) Appropriate use of different classes. (5 points)
4. Appropriate use of sequential (Do in order) and parallel (Do together) programming constructs. (5 points)
5. Appropriate use of If/Else statements (10 points).

Grading

6. Appropriate use of loop (Loop and While) structures. All repeated code should be in loop structures. Both types of loop structure must be used. (10 points)
7. Use of Lists (15 points)
    a) Making use of lists in program (5 points).
    b) Using the *for all together* construct (5 points).
    c) Using the *for all in order* construct (5 points).
8. Use of sound. (5 points)
9. Originality and creativity (the wow factor!). (10 points)
10. Movement of camera (direction). (5 points)
11. Nesting If/Else, Loop, While, and For all statements (**BONUS**: 5 points)

Deductions

- 5 points will be deducted for each 10 seconds below the minimum length requirement.
- 2 points will be deducted for every second of pure dialog that goes above the given limit.
- 10 points will be deducted for each missing random effect.
- A compilation error (i.e. the movie does not run) will result in a 50 point deduction.
- A runtime error will result in a 30 point deduction (this is why you should make sure you include your sound files in the submitted zip file).
- 5 points will be deduced for each missing progress report.