Project 1: Animated Storytelling

Students will use SNAP basics to implement an animated version of a movie, play, nursery rhyme, or other scene.

Overview

Storytelling is a great way to convey culture. Some examples of storytelling are plays and nursery rhymes. Famous plays like those of William Shakespeare have been performed over centuries. Some have been adapted for modern times like West Side Story. A nursery rhyme is a short poem or song written for children. Though the term is typically applied to British or other English language poems, similar concepts exist in many world cultures. These short stories are generally meant to entertain and/or calm young children. Some are believed to have a hidden moral or meaning related to historical events, but many of these meanings are questionable.

Details

Behavior

You will create a short animation in SNAP depicting a story of your choice. You may choose part of a play or nursery rhyme (See http://www.npr.org/sections/ed/2015/07/30/427138970/the-most-popular-high-school-plays-and-musicals and http://en.wikipedia.org/wiki/Nursery_rhymes for a list of possibilities.)

- Whenever the green flag is clicked, your SNAP animation should display your chosen story line by line somewhere on the stage. (This should work correctly even if the last run was interrupted and restart.)
- As each line is shown, sprites should act out the story.
- The animation should advance on its own, but should do so at a pace that allows each action to complete and the viewer to read the line before the next line is shown and new action begins.
- In addition, the sprites must act out the story; you should not simply create a series of static backgrounds or costumes that show a stop-motion version of the story.
- Each line must be readable and must stay shown while the corresponding action is occurring.
- When the story ends, there should be a way for the user to replay the entire animation from the beginning.
- You are free to be as creative as you like with your choice of sprites and actions.

  You may choose from the sprites provided by SNAP or create your own. (You will not be graded on your artistic skills.) You may interpret the story literally or be clever with your depiction (but don't go too far). However, all sprites, behaviors, words, and animations must be school-appropriate.

  If you choose a particularly long story, you may not need to animate the whole thing. Please check with your teacher if you think your story is long enough for this.

Introduction to Computer Science

Implementation Details

1. Fill out a Planning Worksheet for the above program. Make sure you consider all aspects of the program carefully.
2. As mentioned above, your animation must display the text and animate each line. Action must be performed by sprites and must consist of more than simply changing costumes. You must include the following components in your animation:
3. At least two sprites that act in some way to contribute to the depiction of the story
4. At least one sprite that moves
5. At least one sprite that rotates
6. At least one sprite that changes costume
7. At least one sprite that is both hidden and shown at some point
Note that multiple of these requirements may be satisfied by the same sprite (e.g. the same sprite can both move and change costume), but you must have at least two separate sprites that act in the animation.

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Grading Scheme/Rubric

Functional Correctness (Behavior)	
Animation depicts a play, nursery rhyme or other story	2 points
Story is shown one line at a time	2 points
Each line is accompanied by sprites depicting the story, and all action is related to the current line	3 points
Clicking green flag starts animation from beginning	1 point
Animation progresses at a reasonable pace	2 points
User is able to restart animation when it concludes	2 points
Total	**12 points**
Technical Correctness (Implementation)	
Program shows good creativity and effort	2 points
At least two sprites participate in the action	2 points
At least one sprite moves	1 points
At least one sprite rotates	1 points
At least one sprite changes costume	1 points

Functional Correctness (Behavior)	
At least one sprite hides and/or appears	1 points
Total	**8 points**
PROJECT TOTAL	**20 points**