

Project 1: Animated storytelling

Students will use programming basics to implement an animated version of a story.

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.

Emphasize with students

Digital tools and technologies can help capture stories in our own heritage, especially ones that might otherwise be lost, or difficult to write down.

In North America there are over 1000 indigenous communities, speaking more than 300 distinct languages, and a multitude of dialects. Students may be familiar with many places in North America that have been given names adapted from the original aboriginal language spoken in the area, such as Alaska ("peninsula"), or Ontario ("beautiful lake"), or Minnesota ("cloudy water"), or Seattle ("named after a Native American Chief"). Traditionally indigenous peoples relied on storytelling instead of the written language to pass down information and history.

Many other communities have used storytelling as a method to pass down history. And these stories were often shared from generation to generation by word of mouth from a relative or elder.

For this project, student may be encouraged to portray an animation that depicts some aspect of their own heritage, especially stories that have been passed down by word of mouth. Some ideas:

- Animation of how a city/town name came to be
- Animated map of an immigration journey
- A personal family story

Reference

- Traditional plays
- Nursery rhymes
- History of immigration to the US
- Welcome to Canada: 150 years of immigration

Details

Behavior

You will create a short animation depicting a story of your choice.

- Whenever the green flag is clicked, your 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 provided sprites 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 idea is long enough for this.

Implementation details

Fill out a [Planning Worksheet](#) for the above script. Make sure you consider all aspects of the script carefully.

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:

- At least two sprites that act in some way to contribute to the depiction of the story
- At least one sprite that moves
- At least one sprite that rotates
- At least one sprite that changes costume
- 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.

Sharing

Stories are meant to be shared. Prepare to demo your animation with a partner, in front of the whole class, or with your family members. See if your audience can understand the meaning of your animation, and be prepared to provide some background information associated with the story. The animation can also be video captured and shared online.

Emphasize with students (Continued)

Curriculum competencies - Design sharing

As you create software, you will need to keep the end user, or final audience, in mind. Be thinking of what you are hoping to achieve or communicate when you are creating a piece of work, and be prepared to explain your thoughts behind the ideas.

Grading rubric

Functional Correctness (Behavior)	Points
Animation depicts a story	2
Story is shown one line at a time	2
Each line is accompanied by sprites depicting the story, and all action is related to the current line	3
Clicking green flag starts animation from the beginning	1
Animation progresses at a reasonable pace	2
User is able to restart animation when it concludes	2
Total	12
Technical Correctness (Implementation)	
script shows good creativity and effort	2
At least two sprites participate in the action	2
At least one sprite moves	1
At least one sprite rotates	1
At least one sprite changes costume	1
At least one sprite hides and/or appears	1
Total	8
Project total	20