Computing In the Modern World

Create Your Own Scratch Animation Story

Create original characters and an original background. Using Scratch, tell a story about your characters using animation, words and sound.

* Open a blank scratch page
* Choose at least 2 sprite characters
* Choose the costumes for the sprites
* Animate the sprites: create scripts that will move your sprites
* Use x,y coordinates for starting the animation
* Graphics should include ghost, pixilated, mosaic, etc.
* Add a stage or background scenery
* Add words to tell your story
* Make the two sprites interact with each other
* Include sound, voice or music in your scene
* Make your scenes change
* Test your scratch – Does your Animation Work?
* Save Your Work - Name your story

**Scratch Animation Rubrics**

|  |  |  |
| --- | --- | --- |
| CATEGORY | **1 Points** | **0 Points** |
| **Background** | Animation uses background(s) effectively and appropriately for the animation. | Animation has a white background or background(s) that does not fit with the animation. |
| **Sprites** | Included at least 2 Sprites | Included 1 or less Sprites |
| **Graphic Effects** | Animation uses at least one of the graphic effects (ghost, pixilated, mosaic, etc.) | Animation does not use at least one of the graphic effects (ghost, pixilated, mosaic, etc.) |
| **Sound** | Project has audio. | Project does not have audio. |
| **Interactive?** | Animation is interactive and there are directions. | Animation is not interactive or there are no directions. |
| **Overall** | Animation puts all of the above together to create a functional introduction to the website. | Animation does not put all of the above together into a functional introduction to the website. |

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Computing in the Modern World – Binary Code Activity

Create Your Secret Messages

On a separate piece of paper, write down your secret answers to the following questions (keep them a secret). Using the binary codes below, change your answers from the alphabet to binary codes. Write your code in the spaces provided. Once you finish writing your code, hand this sheet to your partner and they will decode you secret answers in the space on the write.

|  |
| --- |
| 1. My favorite Professional Basketball team is |
| \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_ ­­­  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_ |
| 2. My favorite color is |
| \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_ |
| \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_ |
| 3. My favorite food is  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_  \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ­­­ \_\_\_\_\_ |

A-00001 B-00010 C-00011 D-00100 E-00101 F-00110 G-00111

H-01000 I-01001 J-01010 K-01011 L-01100 M-01101 N-01110

O-01111 P-10000 Q-10001 R-10010 S-10011 T-10100 U-10101

V-10110 W-10111 X-11000 Y-11001 Z-11010

Computing In the Modern World

Alice Storyboard

Create a storyboard with characters and actions that represent the Alice graphics programming environment OF YOUR CHOICE.  You will be using the storyboard as a guide to assist you with programming in Alice.

***Your scenario must contain:***

* At least 2 different characters.
* Scenery (nothing excessive. This should include at least three different objects.
  + Note that each snapshot is associated with objects in certain positions, colors, sizes, and poses. When one or more transitions (changes) occur in the animation, the transition leads to the next scene (state).

***Each Scene should contain:***

* Scene #
* Picture / Graphic
* Description
* Sound (if any)
* Text (if any)

For our purposes, preparing storyboard sketches is not intended to be a highly artistic task.

Simple circles, squares, and lines can be used to represent the objects that will appear in the scene. If necessary, shapes can be labeled with the name of the object or color-coded.

Your storyboard should contain actions (methods) that each character carries out as the story progresses from one scene to another scene.

***Outline the steps in your storyboard***

* At least 8 steps (actions or methods). These must include at least one use of the "Do together" command and at least one use of the "Do in order" command.
* Steps are separate scenes
* Note that more than one step can be done in one scene (be sure to note which steps will be done separately, in order and together)

Your storyboard should be detailed enough to coincide line by line with commands in Alice. Once complete, your template world should match your storyboard.

Scene # \_\_\_\_

Visual (Picture, graphic, etc.)

Description:

Sound:

Text

Computing In the Modern World

Alice Storyboard Grading

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

ORGANIZATION AND PRESENTATION

\_\_\_\_\_\_ (1-20 pts.) Storyboard Components (scene #, graphics, description, sound, text)

\_\_\_\_\_\_ (1-10 pts.) Two different characters

\_\_\_\_\_\_ (1-10 pts.) Scenery

\_\_\_\_\_\_ (1-10 pts.) One “Do together” action

\_\_\_\_\_\_ (1-10 pts.) One “Do in order” action

\_\_\_\_\_\_ (1-30 pts.) Six other actions by characters or objects in the scene

\_\_\_\_\_\_ (1-10 pts.) Written storyboard corresponds to Alice world

\_\_\_\_\_\_ (1-100 pts.) TOTAL