

Exploring Computer Science

Scratch #5 – Alphabet

Objective: Demonstrate your understanding of the different ways that Sprites can handle events.

1. In your *Exploring Computer Science* folder, create a folder titled *First_Last_Scratch_5*
2. Start Scratch. Save this project in your *Scratch_5* folder as *alphabet.sb2*.
3. You are to create an alphabet learning game.
 - a. You must have at least 10 letter Sprites
 - b. It must be obvious looking at your letter Sprite what letter the Sprite represents. Don't use letters that are hard to understand. Also, the letters must be easy to click, so don't use real skinny ones.
 - c. Your alphabet learning game must have a theme, i.e., animals, food, etc.
 - d. The following must happen when each Sprite is clicked:
 - The Sprite must change its costume to be a picture of something from your theme that starts with the letter.
 - The Sprite must use a *say:for:sec:* block to output the letter and what the letter stands for, i.e., *B is for Butterfly*.
 - The Sprite must change back into its letter costume.
 - e. The same thing must happen when the letter associated with the Sprite is typed on the keyboard:
 - The Sprite must change its costume to be a picture of something from your theme that starts with the letter.
 - The Sprite must use a *say:for:sec:* block to output the letter and what the letter stands for, i.e., *B is for Butterfly*.
 - The Sprite must change back into its letter costume.
 - f. You must not have a *wait:secs* block anywhere in the project!
4. Extra Credit possibilities:
 - a. Use a microphone to record the message for each letter and then play the message/sound when the letter is clicked. (i.e. *B is for Butterfly*).
 - b. Use motion to move each letter to a specific location on the screen before changing costume and saying what the letter stands for.