Scratch Programming

Event Driven Programming

Objectives

You will be able to:

◎ Explain event driven programming
◎ Write a program that responds to user created events from the mouse and keyboard
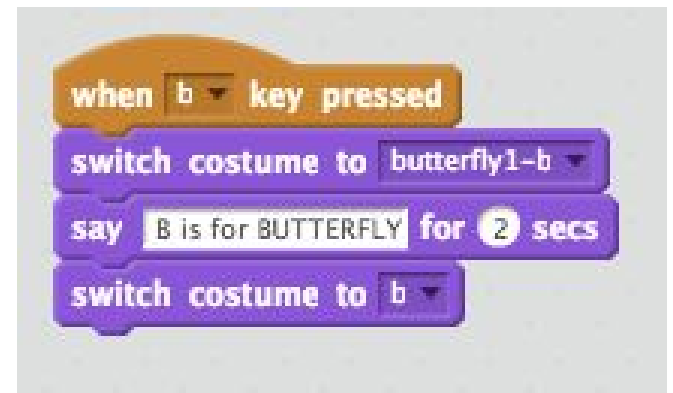
Journal Entry

How do the programs on the computer know what the user wants to do next?

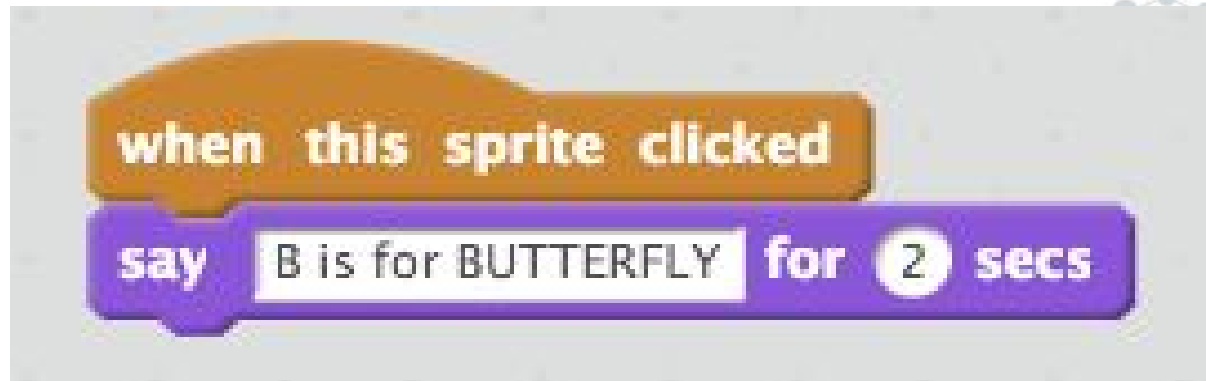In other words, if you are surfing the web, how does the computer know what page you want to go to next?

Event Driven Programming

◎ User Events Driving the Program
  ○ Mouse Events (Clicks, movement)
  ○ Keyboard Events (Typing)
◎ Scratch Blocks
  ○ "when green flag clicked" (used already)
  ○ "when Sprite clicked"
  ○ "when __ key pressed"

Event Driven Blocks....

◎ "when Sprite clicked"

◎ "when __ key pressed"

Let's Take a Look…. Costumes

◎ Create a new costume
  ○ Use another Sprite
  ○ Import your own picture
  ○ Paint your own picture

◎ Change costumes

```
switch costume to b ▼
```

```
switch costume to butterfly1-b ▼
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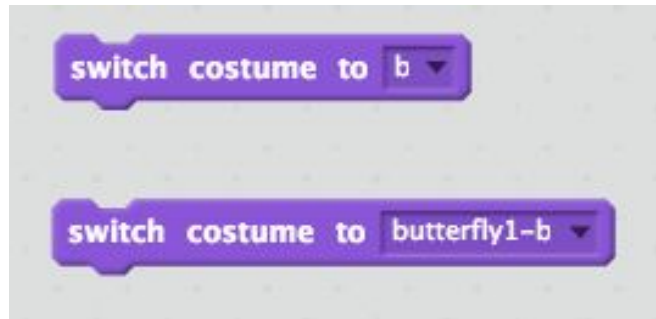
◎ Create works like PhotoShop
  ○ Save a picture file you want
  ○ Use the "open" icon to load
  ○ Modify using the paint tools

Scripts   Costumes   Sound

New costume:

Poster

1

b
100x100

2

Poster
121x147
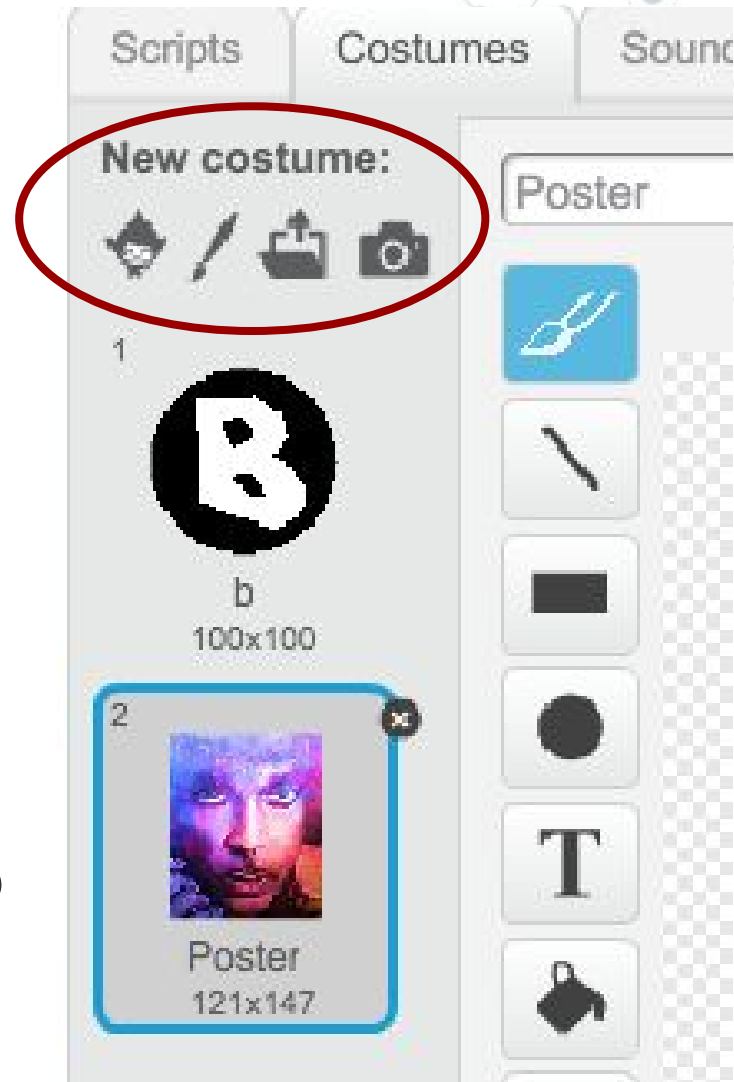
Alphabet Learning Project….

Create an "Alphabet" program in Scratch that contains at least 10 different letters. When a letter is clicked on or the corresponding key is pressed, the letter will change to a picture of something that starts with the letter. The picture will then say the name of the letter as well as the description of the picture (ie. "E is for Elephant").

Look of Sprite when Green Flag Clicked

After user event, Sprite changes costume and "says"

A is for Apple

Sprite is clicke or letter is pressed

Alphabet Learning Rubric….

Do you have?	Points Possible	Points Earned
Have at least 10 different letters.	4	
Have a theme for your letter game (i.e. animals, food, etc.)	3	
Sprites change costume when clicked on.	4	
Sprites change costume when letter is typed on keyboard	4	
Use the "say _ for _ sec" to output what the letter stands for (i.e. "E is for Elephant")	3	
Sprites all turn to letters when the "when green flag clicked"	2	
TOTAL:	20	

Make sure to save your file to your folder on the Z: drive and then go to classroom.google.com and attach the file to the assignment to submit.