



Solution Sheets

Fashion and Design

Use the sample code blocks to help club members as they build the core project of the day. These blocks represent just **one way to complete the core project**, and club members may use different blocks to build their projects. These sheets simply suggest a solution you can refer to if a club member gets stuck or can't make his or her project function correctly.

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Activity 1: Fashion Story

Survey Video

In this video, club members will:

1. Watch a video that introduces the survey.
2. Complete the survey.
3. Submit the survey, and watch the next video.

NOTE: The “next” arrow will turn green once the survey is complete. Clicking the green “next” arrow submits the survey.



Introduction to Scratch [Optional]

In this video, club members will:

1. Learn about computer science and the programming language Scratch.

NOTE: If your club members have never been in a CS First club before, advise them to watch the introduction video.

Welcome to CS First!

Click "Watch introduction" to learn about CS First and Scratch.

Watch introduction

No thanks, I've seen it

Video 1: What Is Computer Science?

In this video, club members will:

1. Open the “Fashion Story Starter Project” link next to this video.
2. Click "remix."
3. Sign into Scratch with their username and password.

Video 2: Choose a Story Prompt

In this video, club members will:

1. Choose a story prompt.
2. Select the Android sprite and the looks menu, and drag a “say” block into the scripts editor.
3. Type one of the fashion story starters into the block.
4. Add a “when flag clicked” block from the events menu to run the program.

NOTE: Code and sprites will vary.

Costume for the
Android sprite:

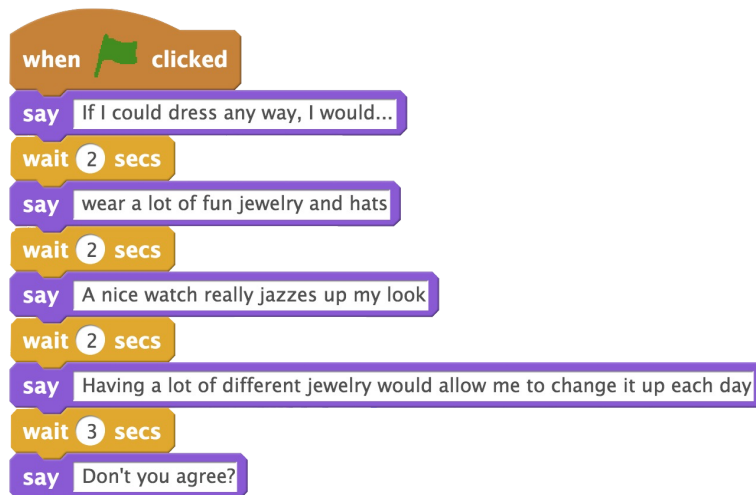


Video 3: Add to the Story

In this video, club members will:

1. Select the Android sprite, and choose a costume from the costumes tab.
2. Continue the fashion story starter by adding more “say” and “wait” blocks.

Costume for the
Android sprite:



Add-on 1: Appearing Objects

In this video, club members will:

1. Select the Object sprite, and click the costumes tab to choose an object.
2. Program the object to glide on the stage using “go to” and “glide” blocks.
3. Use “broadcast” and “when I receive” blocks to run the glide code.
4. Use “hide” and “show” blocks to make the object appear.

Costume for the **Object** sprite:



```

when clicked
hide
go to x: -190 y: -125
    
```

```

when I receive object appears
show
glide 1 secs to x: 98 y: -14
    
```

Costume for the **Android** sprite:



```

when clicked
say If I could dress any way, I would...
wait 2 secs
say wear a lot of fun jewelry and hats
wait 2 secs
broadcast object appears
say I think watch really jazzes up my look
wait 2 secs
say Having a lot of different jewelry would allow me to change it up each day
wait 3 secs
say Don't you agree?
    
```

Add-on 2: Thought Bubble pt1

In this video, club members will:

1. Select the Thought Bubble sprite, and click the costumes tab to select an emoticon
2. Program the Thought Bubble sprite to change costumes using the “switch costume to” block.
3. Use “broadcast” and “when I receive” blocks to change the Thought Bubble sprite’s costume.
4. Program the Thought Bubble sprite to start on a blank costume using the “when flag clicked” and “switch costume to” blocks.
5. Repeat this process to display other emoticons.

Costume for the Thought Bubble sprite:



```

when flag clicked
  switch costume to blank
  
```

```

when I receive show happy
  switch costume to happy
  
```

Costume for the Android sprite:



```

when flag clicked
  say If I could dress any way, I would...
  wait 2 secs
  broadcast show happy
  say wear a lot of fun jewelry and hats
  wait 2 secs
  say A nice watch really jazzes up my look
  wait 2 secs
  say Having a lot of different jewelry would allow me to change it up each day
  wait 3 secs
  say Don't you agree?
  
```

Add-on 2: Thought Bubble pt2

In this video, club members will:

1. Select the Thought Bubble sprite, and duplicate the blank costume to create an emoticon inside it.
2. Edit the thought bubble using the tools in the Paint editor.
3. Fill colors with the paint bucket, use the reshape tool to customize different shapes, and click the undo button to remove mistakes.
4. Program the costume to show using “when I receive,” “switch costume to,” and “broadcast” blocks.

Costume for the Thought Bubble sprite:



when clicked

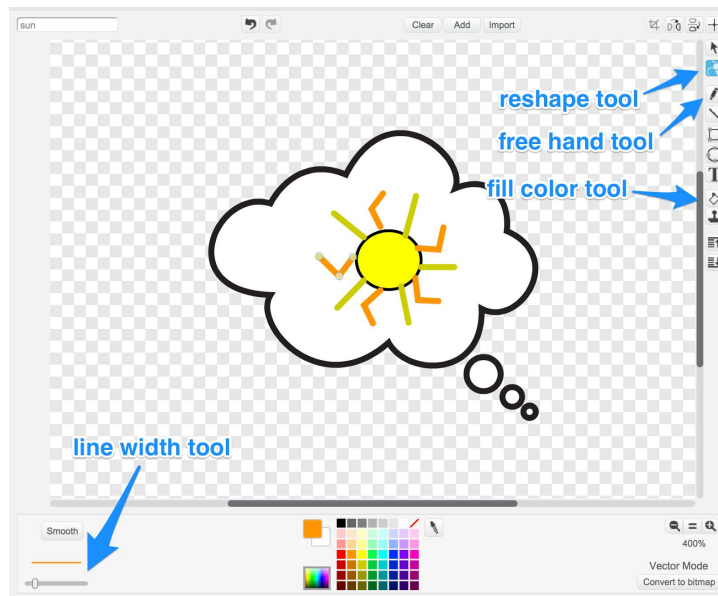
switch costume to blank

when I receive show happy

switch costume to happy

when I receive show sun

switch costume to sun



Costume for the **Android** sprite:



```

when green flag clicked
say If I could dress any way, I would...
wait 2 secs
broadcast show happy
say wear a lot of fun jewelry and hats
wait 2 secs
broadcast show sun
say A nice watch really jazzes up my look
wait 2 secs
say Having a lot of different jewelry would allow me to change it up each day
wait 3 secs
say Don't you agree?
    
```

Add-on 3: Color Craze

In this video, club members will:

1. Select the stage, and click the backdrops tab to select a backdrop.
2. Change the backdrops look by using a “change effect by” block.
3. Add a sound by clicking on the sounds tab and using a “play sound until done” block.
4. Add “forever” blocks to each block stack to run the code over and over.
5. Add “when flag clicked” blocks to the top of the block stacks.

Backdrop for the **Stage**:



```

when green flag clicked
forever
change color effect by 10

when green flag clicked
forever
play sound dance magic.mp3 until done
    
```

Activity 2: Fashion Walk

Video 1: Fashion Walk Intro

In this video, club members will:

1. Open a starter project.
2. Remix the project.
3. Sign in with their username and password.

NOTE: Club members can choose between 3 different starter projects.

Club members will not code any parts of this project until after they watch the second video.

All examples below will use "Fashion Walk Starter Project 1"

Video 2: Walk the Walk

In this video, club members will:

1. Make the sprite move to the center of the stage.
2. Make the sprite move to the end of the stage.

NOTE: Code and sprites will vary.

Costume for the
model sprite:

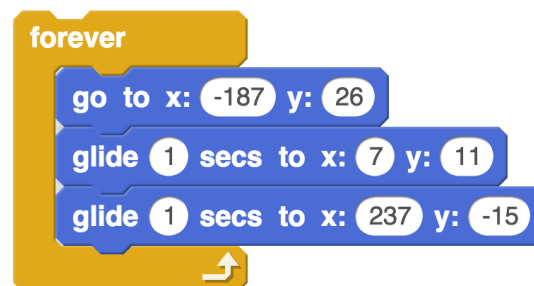


Video 3: Reappear On Stage

In this video, club members will:

1. Make the sprite reappear on the left side of the stage.
2. Make the sprite continually move across and reappear on the stage.

Costume for the
model sprite:

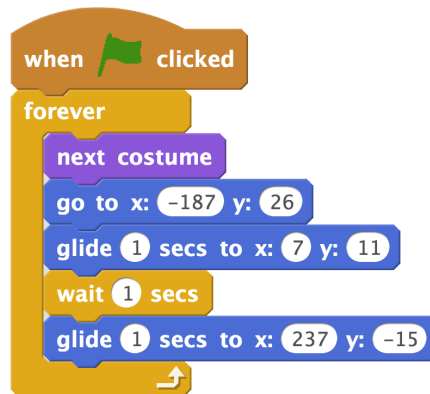


Video 4: Change Appearance

In this video, club members will:

1. Make the sprite's costume change each time it reappears on stage.
2. Make the sprite pause on stage.

Costume for the model sprite:

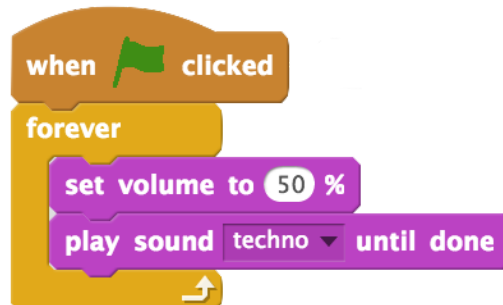
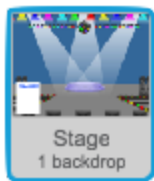


Add-On 1: Theme Music

In this video, club members will:

1. Add a sound from the sound library.
2. Add "play sound until done" and "set volume to" blocks inside a "forever loop."
3. Add the "when flag clicked" event so the music will play when the fashion show begins.

Backdrop for the Stage:

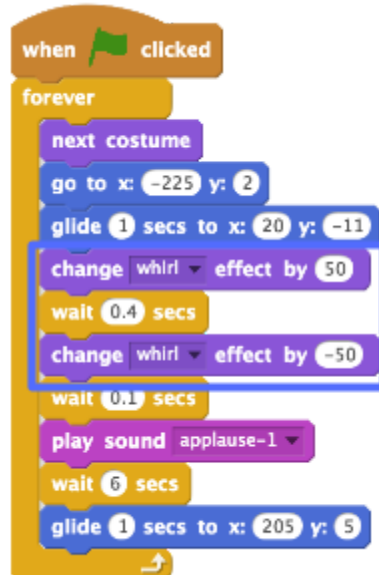


Add-On 2: Model Sashay

In this video, club members will:

1. Add two “change effect by” blocks and select the “whirl” effect. Then, add a “wait” block in between these two blocks.
2. Add this block stack under the first “glide” block.

Costume for the model sprite:



Add-On 3: Customize Wardrobe

In this video, club members will:

1. Duplicate a costume for the model sprite, and edit the wardrobe using the tools in the Paint editor.
2. Fill colors with the paint bucket, ungroup shapes to modify them, and use the reshape tool to customize different shapes.

Costume for the **Android** sprite:



Add-On 4: For the Camera

In this video, club members will:

1. Add a new photographer sprite, then create a broadcast effect using “when I receive,” “change brightness effect,” “clear graphic effects,” and “wait” blocks.
2. Make the photographer randomly take pictures using the “broadcast,” “play sound,” “wait,” and “pick random” blocks inside a “forever” loop.
3. Add a “when flag clicked” event to start this code stack.

Costume for the photographer sprite:



```

when flag clicked
  forever loop
    broadcast flash
    play sound hand clap
    wait pick random 0.5 to 2 secs
  
```

Backdrop for the stage:



```

when I receive flash
  change brightness effect by 100
  wait .08 secs
  clear graphic effects
  
```

Add-On 5: Opening Curtain

In this video, club members will:

1. Add a new curtain sprite from the CS First website.
2. Program the curtain to rise before the fashion show begins.

Costume for the curtain sprite:



```

when flag clicked
  show
  go to x: -2 y: 19
  wait 1.5 secs
  glide 1 secs to x: 1 y: 324
  hide
  
```

Add-On 6: Balloon Celebration (Challenge)

In this video, club members will:

1. Add a new balloon sprite.
2. Code the sprite float up using a "forever" loop and the "go to," "glide," "set size to," and "delete this clone" blocks. Make sure to add a "when I start as a clone" block.
3. Code the balloon celebration to start when the space key is pressed by adding a "forever" loop and "create clone of myself," "change color effect," and "wait" blocks.
4. Add "hide" and "show" blocks to hide the balloon sprite until the celebration starts.

Costume for the balloon sprite:



```

when space key pressed
  forever
    create clone of myself
    change color effect by 25
    wait 0.3 secs
  
```

```

when I start as a clone
  forever
    go to x: pick random -240 to 240 y: -180
    set size to 70 %
    show
    glide 1 secs to x: -77 y: 180
    delete this clone
  
```

```

when green flag clicked
  hide
  
```

Activity 3: Ultimate Stylist

Video 1: Remix the Starter Project

In this video, club members will:

1. Open the starter project.
2. Remix the project.
3. Sign in to Scratch.

NOTE: Club members can choose between 4 different starter projects.

Club members will not code any parts of this project until after they watch the second video.

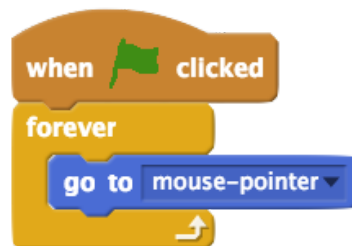
All examples below will use "Ultimate Stylist Starter Project 2."

Video 2: Forever Follow the Mouse

In this video, club members will:

1. Make the sprite follow the mouse pointer.
2. Make the sprite follow the mouse pointer forever.
3. Make the sprite follow the mouse pointer forever when the green flag is clicked.

Costume for the accessory sprite:

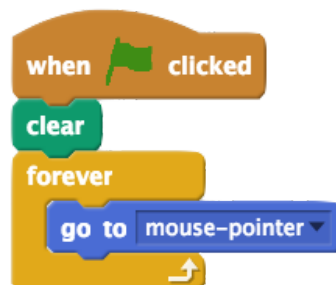


Video 3: Stamp the Accessory

In this video, club members will:

1. Add a "when this sprite clicked" event.
2. Create a stamp of the accessory when they click the sprite.
3. Clear the screen when the green flag is clicked.

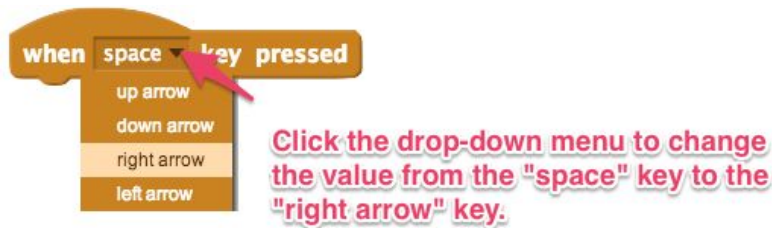
Costume for the accessory sprite:



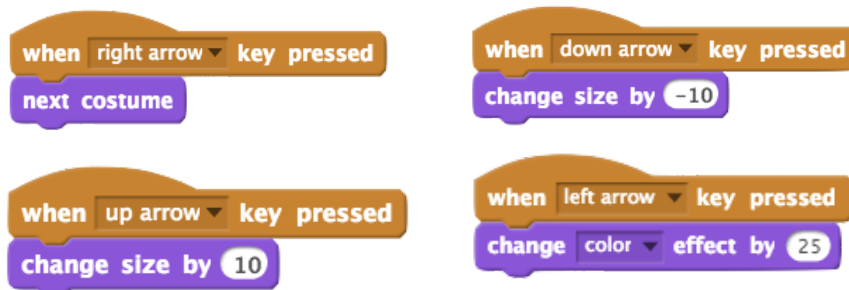
Video 4: Change Up Your Accessories

In this video, club members will:

1. Use a keypress event to change the accessory displayed.
2. Use a keypress event to change the color of the accessory.
3. Use a keypress event to shrink the accessory.
4. Use a keypress event to enlarge the accessory.



Costume for the accessory sprite:



Add-On 1: Refashion

In this video, club members will:

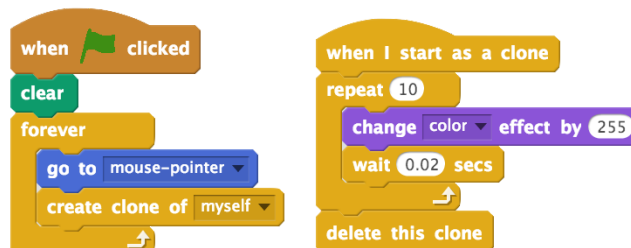
1. Duplicate an accessory, then use the different tools in the **paint editor** to change it.
2. Use the "ungroup" and "reshape" tools to redesign accessories, and try out the different color gradients to customize them. Take design risks!

Add-On 2: Flashy Mouse

In this video, club members will:

1. Program the stylist tool to create a colorful trail as it moves around the screen.

Costume for the accessory sprite:



Add-On 3: Stylist Game

In this video, club members will:

1. Make the accessories in the costume menu constantly cycle using "next costume," "forever," "wait," and "when flag clicked" blocks.
2. Code the program to stop when the timer reaches 10 seconds using "wait until," "greater than," "timer," "stop all," and "when flag clicked" blocks.
3. Add a "play sound until done" block to alert the user that the game is over.
4. Give the user instructions about the game using a "say" block.

Costume for the accessory sprite:



```

when flag clicked
  forever loop
    wait 1.5 secs
    next costume
  
```

```

when flag clicked
  forever loop
    if timer > 10 then
      play sound triumph until done
      stop all
  
```

```

when flag clicked
  say Decorate the person in 10 seconds or less! for 2 secs
  
```

Add-On 4: Animate Model

In this video, club members will:

1. Duplicate the backdrop and make small modifications to the image
2. Add a repeat loop, a "switch backdrop" block, and a "wait" block to animate the model.
3. Place this code stack under the "when space key pressed" and "stamp" code stack.

Costume for the accessory sprite:



```

when space key pressed
  stamp
  repeat 3
    switch backdrop to next backdrop
    wait .2 secs
  
```

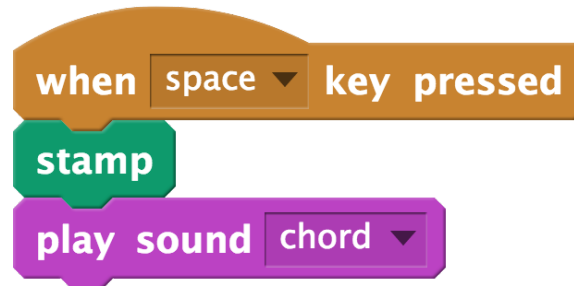
Add-On 5: Sound (Challenge)

In this video, club members will:

1. Add a sound from the sound library.
2. Program the sound to play.

NOTE: Club members' code may vary. Below is an example:

Costume for the
accessory sprite:

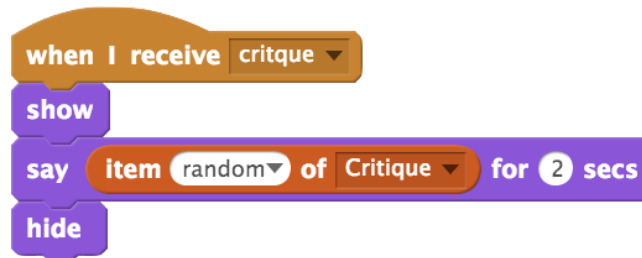


Add-On 6: Stylist Critique

In this video, club members will:

1. Add a critic sprite.
2. Program the critic to give feedback on the project.

Costume for the
critic sprite:



Activity 4: Fashion Innovation

Video 1: Fashion Innovation Introduction

In this video, club members will:

1. Click the "Innovation Starter Project" link.
2. Click the remix button.
3. Sign in to Scratch.

NOTE: Club members will not code any parts of this project until after they watch the second video.

Video 2: Imagine Your Innovation

In this video, club members will:

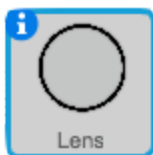
1. Click the model sprite and the costumes tab to choose a costume for the fashion innovation.

Video 3: Interactive Outfit

In this video, club members will:

1. Choose at least two parts of the model's outfit to describe.
2. Write a description explaining how the outfit is a fashion innovation.
3. Use an "If then" block with a "touching color" block, so the "say" blocks run only if the lens is touching the correct part of the outfit.
4. Click inside the "touching color" block, then click on part of the outfit to update the color.

Costume for the
lens sprite:



```

when this sprite clicked
  if touching color [red] ? then
    say This shirt adjusts for the temperature. for 2 secs
    say It grows thinner when it is hot and thicker when cold. for 2 secs
  if touching color [black] ? then
    say These look like ordinary boots for 2 secs
    say but when I click the heels together they allow me to time travel. for 2 secs
  if touching color [blue] ? then
    say Meet my robot cat. for 2 secs
    say He takes notes for me in class. for 2 secs

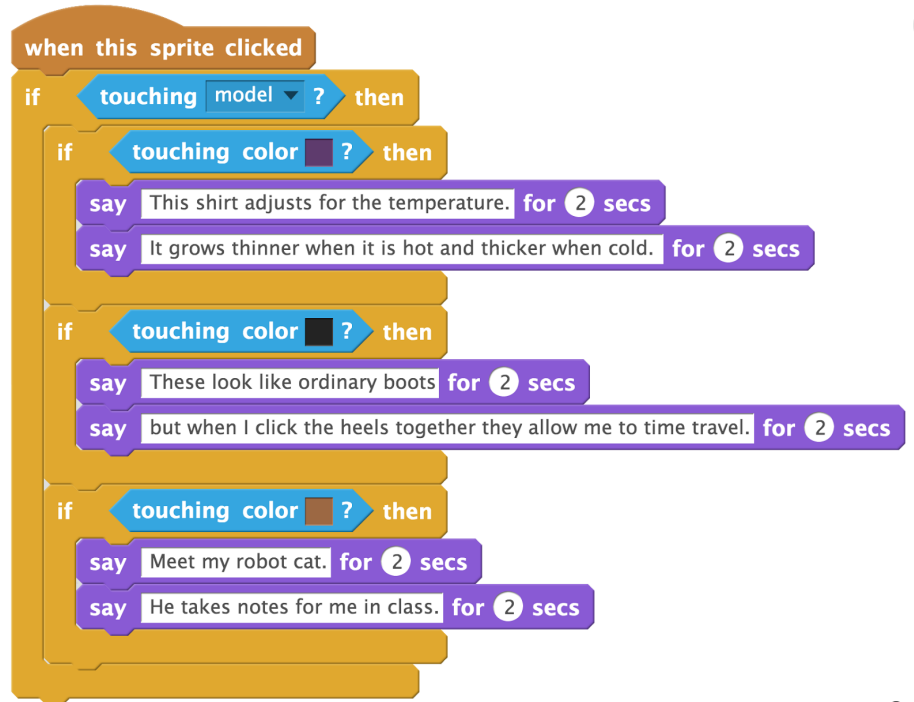
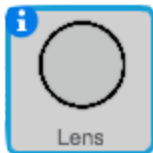
```

Video 4: For the Model Only

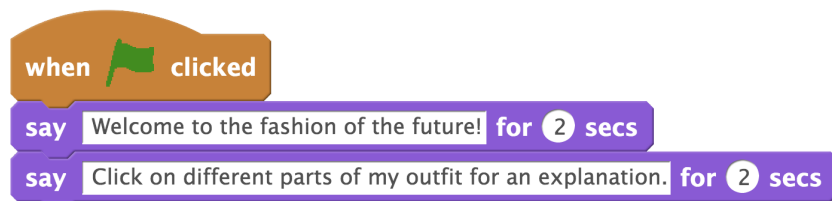
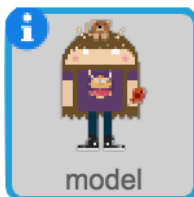
In this video, club members will:

1. Add an "If touching model" block around all the color conditionals in the project so that the lens does not describe the outfit when the backdrop is clicked.
2. Add a backdrop to the project.
3. In the Model sprite, add instructions that tell the user how the project works.

Costume for the
Lens sprite:



Costume for the
model sprite:

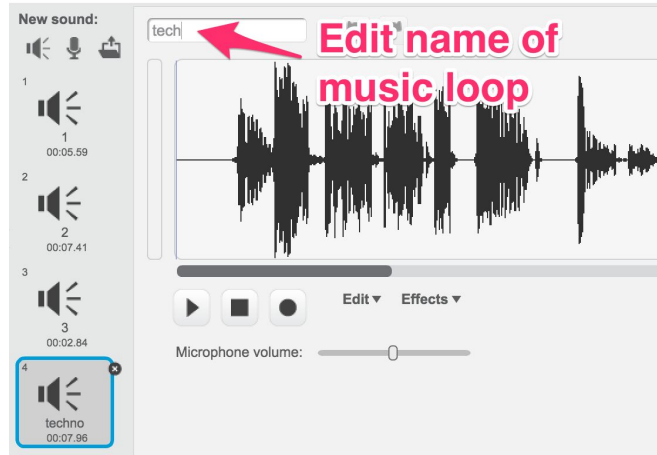


Add-On 1: Fashion Playlist

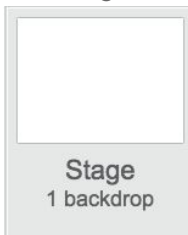
In this video, club members will:

1. Add several music tracks to the program.
2. Program the sound to start when the flag is clicked.
3. Allow the user to change tracks by pressing the arrow keys.
4. Paint a new sprite to show off the music playlist feature.

Add music tracks and edit names of tracks:



Backdrop for the Stage:



```

when green flag clicked
  set music to 1
  forever loop
    play sound music until done
  
```

```

when right arrow key pressed
  if 4 < music then
    stop all sounds
    change music by 1
  
```

```

when left arrow key pressed
  if music > 1 then
    stop all sounds
    change music by -1
  
```

Add-On 2: More Models

In this video, club members will:

1. Use “switch costume” and “when key pressed” blocks to switch between different models.
2. Use “if then,” “equals,” and “attribute of” blocks to describe a specific model.
3. Duplicate the code for other models.
4. Use a “say” block to tell users how to switch between different models.

Costume for the model sprite:



```

when clicked
say Welcome to the fashion of the future for 2 secs
say Move your mouse over different parts of my outfit for an explanation. for 2 secs
say Press 1 or 2 to change the invention. for 2 secs
    
```

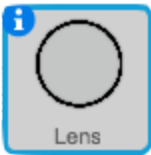
```

when 1 key pressed
switch costume to redhair
    
```

```

when 2 key pressed
switch costume to ponytails
    
```

Costume for the lens sprite:



```

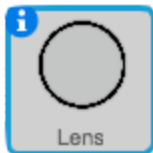
when this sprite clicked
if touching model ? then
  if costume name of model = redhair then
    if touching color ? then
      say This shirt adjust for the temperature outside. for 2 secs
      say The fabric grows thinner when it is hot and thicker when cold. for 2 secs
    if touching color ? then
      say These look like ordinary boots for 2 secs
      say but when I click the heels together they allow me to time travel. for 2 secs
    if touching color ? then
      say Meet my robot cat. for 2 secs
      say He takes notes for me in class. for 2 secs
  if costume name of model = ponytails then
    if touching color ? then
      say This shirt keeps me dry in the rain for 2 secs
      say and turns into wings so that I can fly. for 2 secs
    
```

Add-On 3: Add Sound

In this video, club members will:

1. Check out the sounds included in the starter project.
2. Choose a sound to add.
3. Use the "sound" blocks to make the lens sprite play a sound when the user clicks on part of the sprite's outfit.

Costume for the
Lens sprite:



```

when this sprite clicked
  if touching Model ? then
    if touching color ? then
      play sound pop
      say I can sense objects for the temperature. for 2 secs
      say It grows thinner when it is hot and thicker when cold. for 2 secs
    if touching color ? then
      play sound alien creak2
      say These look like ordinary boots for 2 secs
      say but when I click the heels together they allow me to time travel. for 2 secs
    if touching color ? then
      play sound chomp
      say Heeey robot cat for 2 secs
      say He takes notes for me in class. for 2 secs
  
```

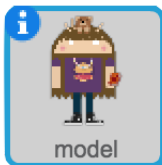
Add-On 4: Fashion Feature

In this video, club members will:

1. Add a special feature to the fashion innovation to make the model move or behave in an unexpected way.
2. Add a "when I receive" event to the code for the unexpected behavior.
3. In the lens sprite, duplicate an "if touching color" block, update the color, and add a "broadcast" block.

NOTE: Code and sprites may vary.

Costume for the
model sprite:



```

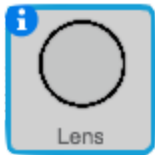
when I receive Fly
  glide 1 secs to x: 7 y: 104
  turn 40 degrees
  repeat 10
    change size by -5
    move 10 steps
    wait 0.02 secs
  glide 1 secs to x: -50 y: 108
  glide 1 secs to x: 136 y: 48
  glide 1 secs to x: -147 y: -69
  repeat 10
    change size by 5
    move -10 steps
    wait 0.02 secs
  go to x: 7 y: 23
  point in direction 90
  set size to 100 %

```

```

when clicked
go to x: 7 y: 23
point in direction 90
set size to 100 %
    
```

Costume for the lens sprite:



```

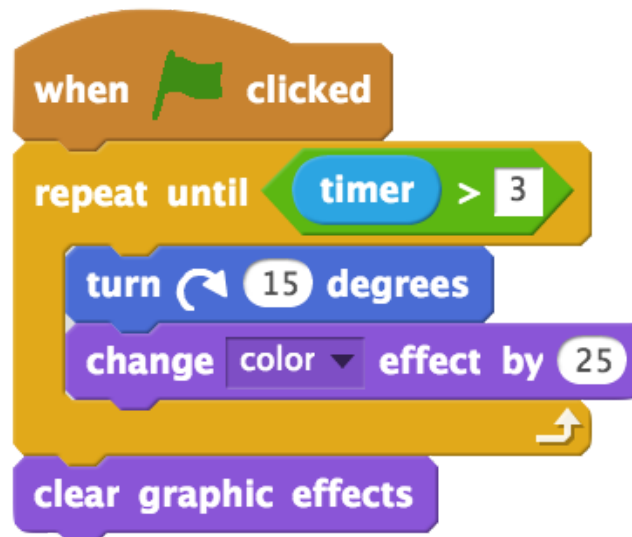
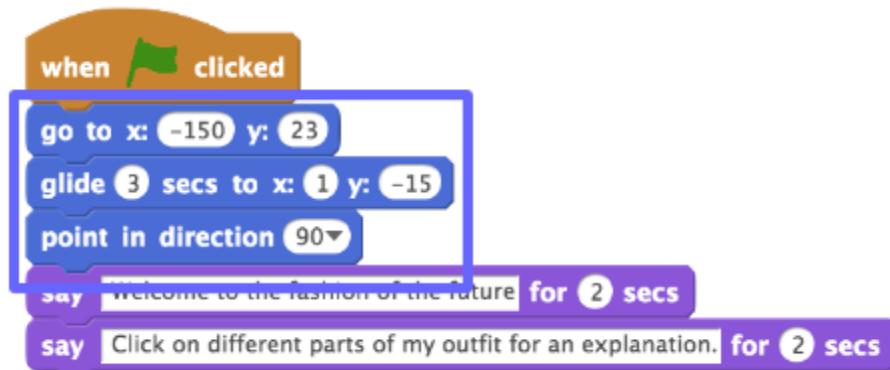
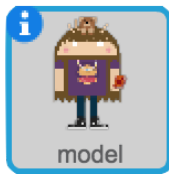
when this sprite clicked
if touching Android ? then
if touching color ? then
say When I activate the fly patch on my shirt, my rocket boots send me into the air! for 2 secs
broadcast Fly
if touching color ? then
say This shirt adjust for the temperature outside. for 2 secs
say The fabric grows thinner when it is hot and thicker when cold. for 2 secs
if touching color ? then
say These look like ordinary boots for 2 secs
say but when I click the heels together they allow me to time travel. for 2 secs
if touching color ? then
say Meet my robot cat. for 2 secs
say He takes notes for me in class. for 2 secs
    
```

Add-On 5: Make an Entrance

In this video, club members will:

1. Program the sprite to glide on stage.
2. Make the sprite repeatedly spin and change color for a set amount of time using the "repeat until," "greater than," "timer," "turn," and "change color" blocks.
3. Program the sprite to change back to its original color and stand upright using the "clear graphic effects" and "point in direction" blocks.

Costume for the model sprite:

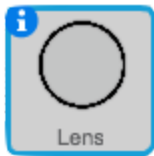


Add-On 6: Special Effects

In this video, club members will:

1. Pick a costume or draw one.
2. Animate the costume.
3. Create clones of the costume.
4. Add graphic effects using the "change effect" block.

Costume for the lens sprite:



```

when I start as a clone
  switch costume to heart
  repeat 10
    change x by pick random -10 to 10
    change y by pick random -10 to 10
    wait 0.1 secs
  delete this clone
  
```

```

when clicked
  forever
    if touching Model ? then
      if touching color ? then
        change color effect by 25
        create clone of myself
        wait 0.2 secs
      if touching color ? then
        change color effect by 25
        create clone of myself
        wait 0.2 secs
      if touching color ? then
        change color effect by 25
        create clone of myself
        wait 0.2 secs
  
```

Activity 5: Fashion Poll

Video 1: Create a Fashion Poll

In this video, club members will:

1. Open the starter project.
2. Remix the project.
3. Sign in to Scratch.

Video 2: Choose Your Poll Options

In this video, club members will:

1. Add four sprites to their projects.
2. If needed, use the shrink tool to make the sprites small enough to fit on the stage.

NOTE: Club members will not code any parts of this project until after they watch the third video.

Links

- [Fashion Poll Starter Project](#)
- [Fashion Poll Image Library](#)

Follow the link to download images from the CS First website.



Video 3: Track the Poll Votes

In this video, club members will:

1. Make a variable.
2. Name the variable.
3. Increase the variable value by 1 when the sprite is clicked.
4. Repeat this process for each sprite.

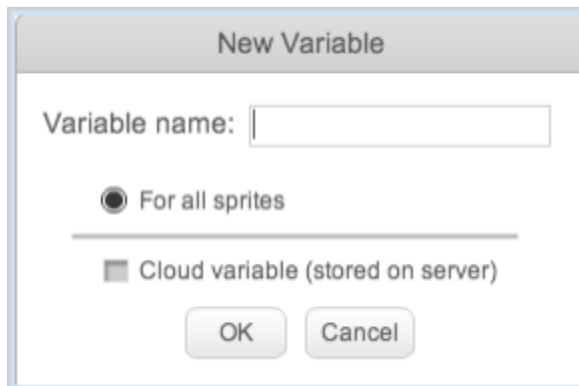
Click "Data" menu.



Click "Make a Variable."



Name the variable, and click "OK."

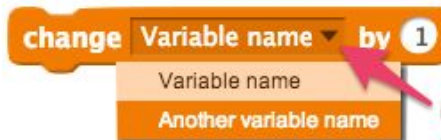


Add this code.

Repeat this process for each sprite.



Variable name should relate to the sprite's name or appearance.



Click the drop-down menu to change the variable displayed.

Video 4: Clear the Poll Counts

In this video, club members will:

1. Set all variables to "0" when the button sprite is clicked.

Code for all sprites:



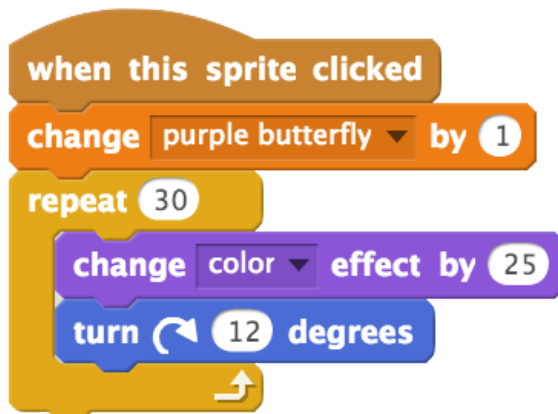
Click the drop-down menu to change the variable displayed.



Add-On: Spinning Celebration

In this video, club members will:

1. Program a sprite to spin and change color when it is clicked.



Add-On: Shout It Out

In this video, club members will:

1. Choose a sound from the sound library.
2. Program a sprite to play a sound and say a message when it is clicked.
3. Program the other sprites to say something when another sprite is clicked.

```

when I receive React
say Good for you! for 2 secs

```

```

when this sprite clicked
change purple butterfly by 1
broadcast React
play sound fairydust
say Yay! for 2 secs

```

Add-On: Shrinking Sprite

In this video, club members will:

1. Continuously check if the sprite is touching the mouse pointer.
2. Program the sprite to shrink if it is touching the mouse pointer.
3. Program the sprite to reset to its original size if it is not touching the mouse pointer.

```

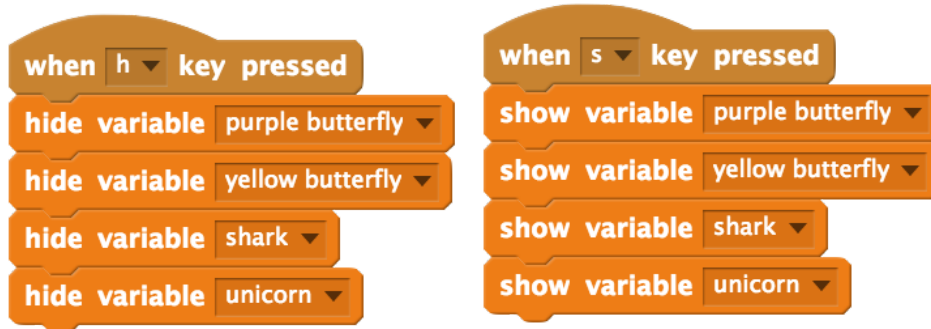
when green flag clicked
forever
  if touching mouse-pointer ? then
    set size to 10 %
  else
    set size to 100 %

```

Add-On: Secret Votes (Challenge)

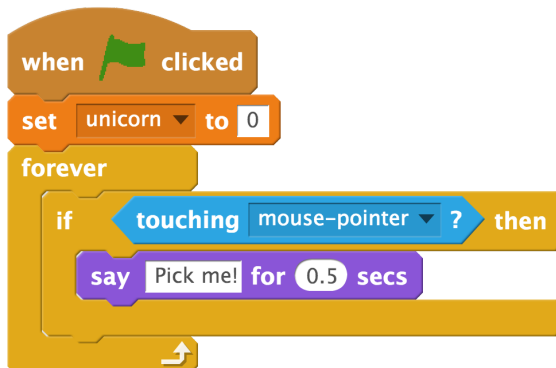
In this video, club members will:

1. Make the vote count secret by hiding the variables.

**Add-On: Pick Me (Challenge)**

In this video, club members will:

1. Create a conditional statement that says: "If this sprite is touching the mouse pointer, then say, 'Pick me!'"



Add-On: Extra Cool Factor (Challenge)

In this video, club members will:

1. Add a sunglasses sprite from the sprite library.
2. Program the sprite to hide, then go to its starting position when the flag is clicked.
3. Add a "go to front" block.
4. Program the sunglasses to show and glide to the sprite when triggered by an event.

f

NOTE: Club members' sprites may vary.

Costume for the
sunglasses sprite:



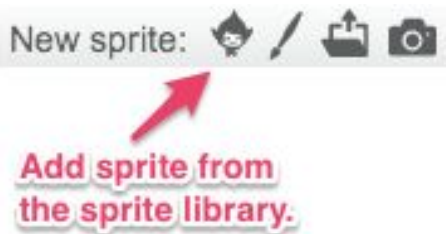
Activity 6: Window Shopper

Video 1: Add a Sprite for Your Store Window

In this video, club members will:

1. Open the starter project.
2. Remix the project.
3. Sign in to Scratch.
4. Add a sprite from the sprite library.
5. Choose a costume for their storefront sprite.

NOTE: Club members will not code any parts of this project until after they watch the second video.

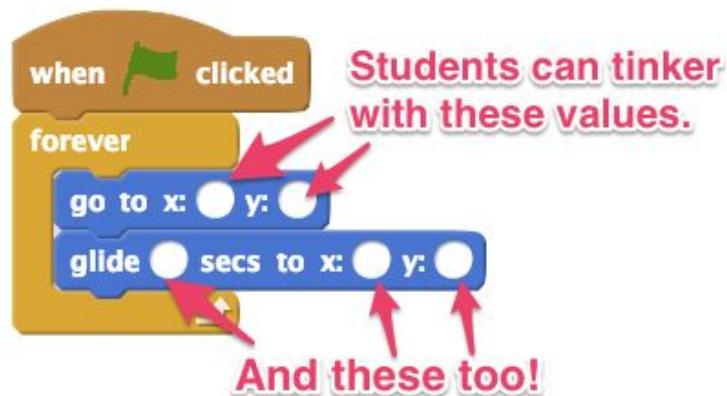


Video 2: One Sprite Flies

In this video, club members will:

1. Program a starting position for the sprite.
2. Program an ending position for the sprite.
3. Make the sprite fly across the screen repeatedly.

Costume for the flying sprite:



Video 3: Clone the Flying Sprite

In this video, club members will:

1. Create a clone of the sprite.
2. Make the clone fly across the stage.
3. Make many clones fly across the stage.
4. Slow down the clone creation process.
5. Make the clones disappear after they complete their flight across the stage.

Costume for the flying sprite:



```

when clicked
  forever
    create clone of myself
    wait 1 secs

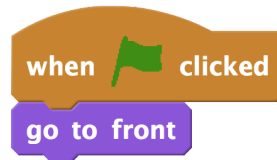
when I start as a clone
  go to x: -241 y: 10
  glide 10 secs to x: 216 y: 10
  delete this clone
    
```

Video 4: Sprites Look Alive

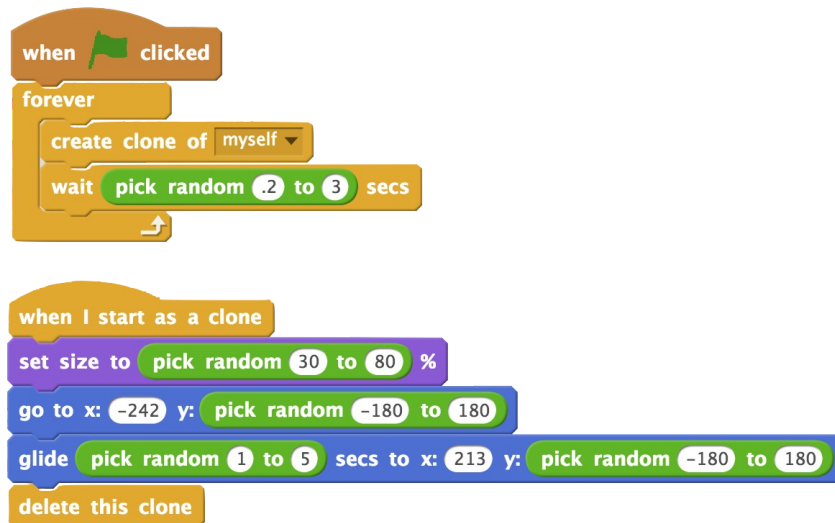
In this video, club members will:

1. Make the sprite's clones start at random intervals.
2. Make the clones start and glide at random heights.
3. Make the clones fly at random speeds and sizes.
4. Make the storefront sprite appear in front of the other sprites.

Costume for the storefront sprite:



Costume for the flying sprite:

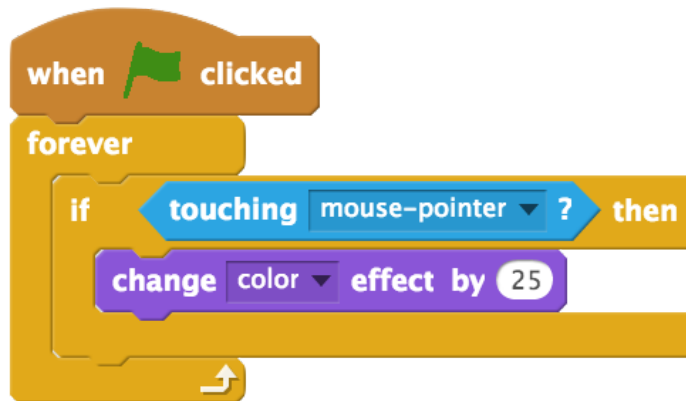


Add-On: Color Change

In this video, club members will:

1. Add a new sprite.
2. Create a conditional statement that says if the sprite is touching the mouse-pointer, then change color.

Costume for the new sprite:



Add-On: Drift

In this video, club members will:

1. Add a new sprite.
2. Program the sprite to move randomly across the screen.
3. Add conditional statements that state: If the sprite touches the window display, another sprite, or the mouse-pointer, then do an effect.

Costume for the new sprite:



```

when clicked
  forever
    if touching Hippo2 ? then
      turn 60 degrees
    if touching storefront3-03 ? then
      turn 15 degrees
      change color effect by 25
  
```

Add-On: Hidden Surprise

In this video, club members will:

1. Add a new sprite.
2. Program the sprite to go to a hidden spot on the stage.
3. Program the sprite to perform a surprising action when it touches the mouse pointer.

Costume for the new sprite:



```

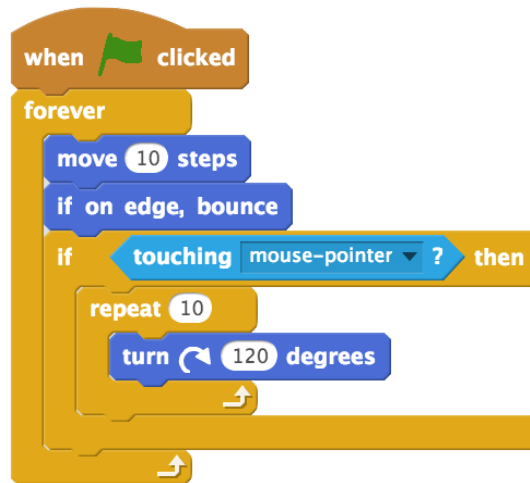
when clicked
  hide
  go to x: pick random -240 to 240 y: pick random -180 to 100
  forever
    if touching mouse-pointer ? then
      show
      say You get 20% off!!!! for 2 secs
  
```

Add-On: Go Crazy

In this video, club members will:

1. Add a new sprite.
2. Program the sprite to repeatedly spin.
3. Program the sprite to repeatedly spin if it touches the mouse pointer.
4. Program the sprite to move and bounce if on the edge.

Costume for the new sprite:



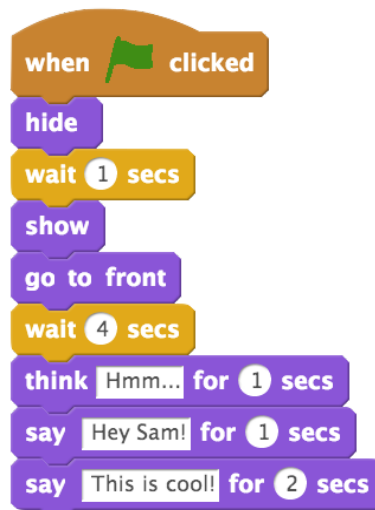
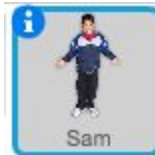
Add-On: Talk About It (Challenge)

In this video, club members will:

1. Add a new sprite.
2. Program the sprite to say or think something related to the program.

NOTE: Costume and sprites may vary.

Costume for the new sprite:



Add-On: Shooting Sprites (Challenge)

In this video, club members will:

1. Add a new sprite.
2. Program the sprite to shoot across the stage.

NOTE: Code and sprites may vary.

Costume for the new sprite:



```
when space key pressed
show
go to x: -240 y: 0
glide 3 secs to x: 240 y: 0
hide
```

```
when space key pressed
say Only a few Hippos left in stock!
```

Activity 7: Pattern Maker

Video 1: Fashion Activity 7 Survey

In this video, club members will:

1. Watch a video that introduces the survey.
2. Complete the survey.
3. Submit the survey, and watch the next video.

NOTE: The “next” arrow will turn green once the survey is complete. Clicking the green “next” arrow submits the survey.



Video 2: Introduction to Procedures

In this video, club members will:

1. Open the starter project.
2. Remix the project.
3. Sign in to Scratch.

NOTE: Club members will not code any parts of this project until after they watch the third video.

Video 3: Print Your Pattern

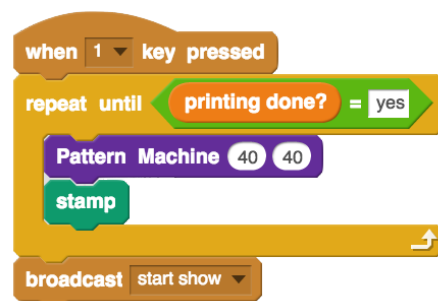
In this video, club members will:

1. Use the print prepare procedure.
2. Program the pattern to stamp.

Block in
this menu:



Costume for the
pattern maker
sprite:

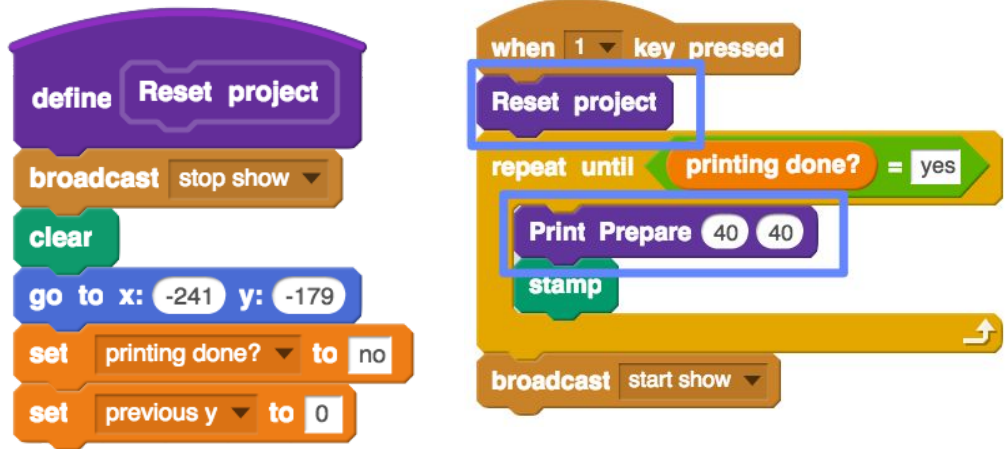


Video 4: Reset the Project for Another Print

In this video, club members will:

1. Create a procedure to reset their projects.
2. Use the procedure to reset their projects.

Costume for the **pattern maker** sprite:



Video 5: Pattern Explorer

In this video, club members will:

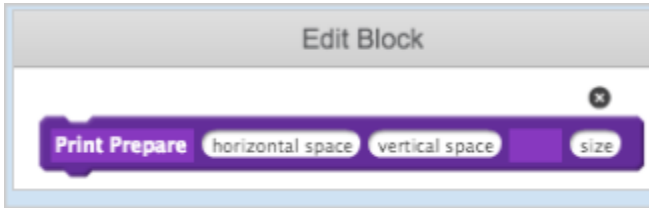
1. Add a size parameter to adjust the size of the pattern.
2. Use the size parameter.
3. Add a new costume to the pattern maker sprite.
4. Reuse the "print prepare" function to print the new pattern.

Right-click on the "define print prepare" block, and choose "edit" from the menu.

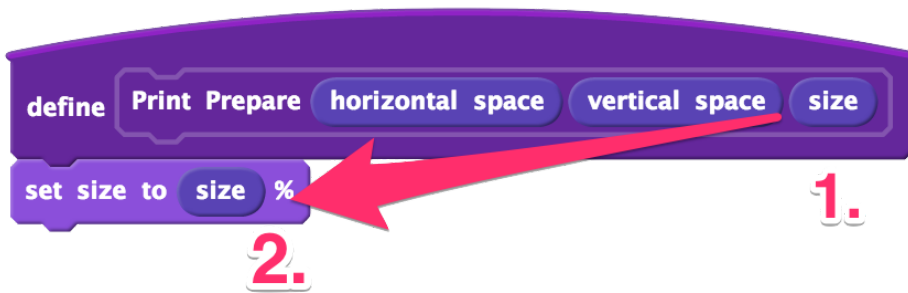


Click on the options dropdown, then click the button next to "add number input." Click "OK."

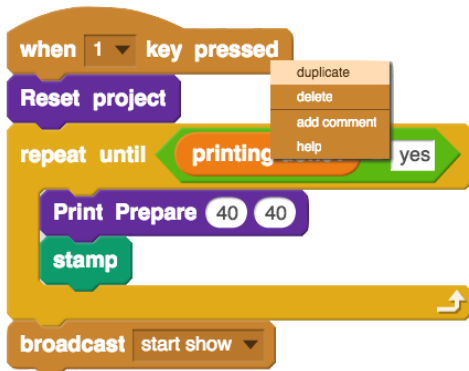
The value "number1" will be added to the block, but club members should type the word "size" in it instead. Click "OK."



From the looks menu, select the "set size to" block, and place it under the "define" block. Then, drag the "size" parameter block into the "set size to" block.



Right-click the code stack, then select "duplicate."

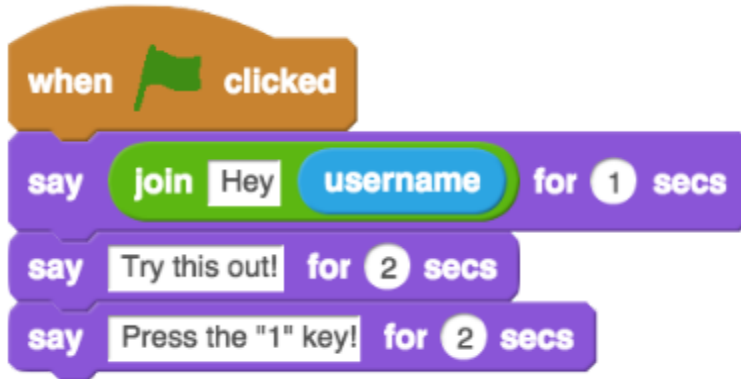


Change the keypress event, and set the "switch costume to" block to the new pattern.

Add-On: Welcome to My Project

In this video, club members will:

1. Add a sprite that greets the user by their username.
2. Add more "say" blocks to include more information about the project.

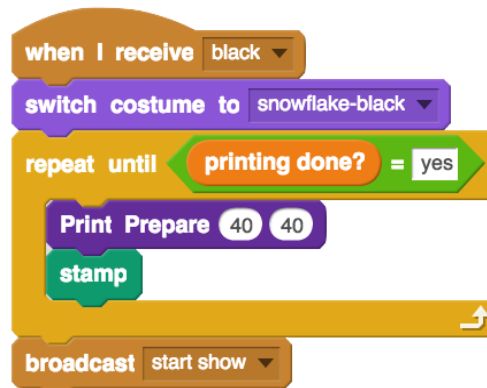


Add-On: Color Selector

In this video, club members will:

1. Duplicate the pattern maker costume, and fill the new costume with a different color. They may choose to repeat this process a couple more times.
2. Create a conditional statement that allows the user to change the pattern color.

Costume for the pattern maker sprite:



Costume for the greeter sprite:



```

when clicked
ask "What color do you want your pattern to be? Red, blue, pink, or black?" and wait
if answer = red then
broadcast red
if answer = blue then
broadcast blue
if answer = pink then
broadcast pink
if answer = black then
broadcast black
    
```

Add-On: Draw an Alternating Pattern (Challenge)

In this video, club members will:

1. Use the drawing tools to draw a pattern.
2. Program the pattern maker sprite to alternate between two patterns when the user presses a key.

Costume for the pattern maker sprite:



```

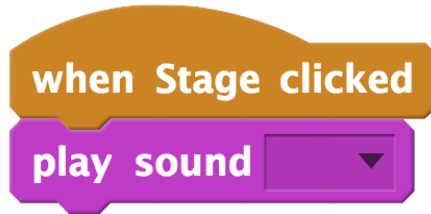
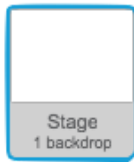
when space key pressed
Reset Project
repeat until printing done? = yes
switch costume to costume3
Print Prepare 50 50 50
stamp
switch costume to costume2
Print Prepare 50 50 50
stamp
broadcast start show
    
```

Add-On: Soundtrack (Challenge)

In this video, club members will:

1. Program the stage to play music when it is clicked.

Backdrop for the stage:



Add-On: New Fabrics

In this video, club members will:

1. Add a new costume to the fabric sprite.
2. Fill the background with white.
3. Draw a new object, and fill it with transparency so the pattern displays within the object.

Use the fill tool to fill the background with white:



Use the fill tool and transparency to make the inside of the drawing transparent.



Add-On: Title Sprite

In this video, club members will:

1. Add a new sprite.
2. Use the text tool to add a title to the sprite for their project.
3. Program the sprite to display when the flag is clicked and then disappear.



Activity 8: Fashion Awards

Video 1: Open the Starter Project

In this video, club members will:

1. Open the starter project.
2. Sign in to Scratch.
3. Remix the project.

NOTE: Club members will not code any parts of this project until after they watch the second video.

Video 2: Give the Award Speech

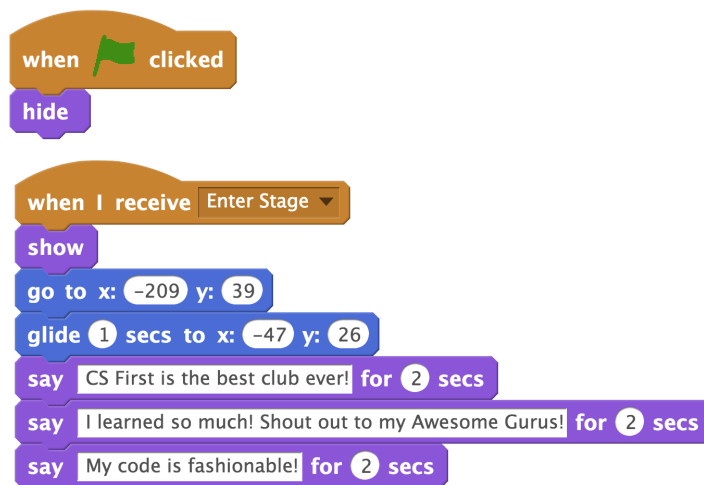
In this video, club members will:

1. Add a sprite.
2. Program a starting and ending position for the sprite and an event to start the program.
3. Broadcast a message to tell the designer sprite to enter the stage.
4. Make the sprite receive the message to enter the stage.

Costume for the
model sprite:



Costume for the
designer sprite:



Add-On: Snazzy Model

In this video, club members will:

1. Program a cartwheel using “turn,” “stamp,” “change color effect by,” “clear,” and “clear graphic effects” blocks, as well as a “repeat” loop.

Costume for the model sprite:



```

when I start as a clone
  repeat 20
    turn 180 degrees
    stamp
    change color effect by 25
  clear
  clear graphic effects
  
```

Add-On: Models Talk

In this video, club members will:

1. Create a list.
2. Add sentences to the list.
3. Make the model sprites say random comments from the list.

Costume for the model sprite:



```

when I start as a clone
  say Others on Stage for 2 secs
  
```

Add-On: Jumping Silhouette

In this video, club members will:

1. Download the “crowd” sprite from the CS First image library.
2. Program the crowd to jump using the “forever” loop and two “glide” blocks.
3. Add a “when I receive” event to make the crowd cheer when the designer sprite enters the stage.

Costume for the crowd sprite:



```

when I receive Enter Stage
  forever loop
    glide .3 secs to x: -7 y: -197
    glide .3 secs to x: 4 y: -170
  
```

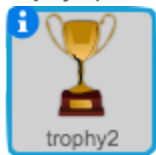
Add-On: Animate Trophy (Challenge)

In this video, club members will:

1. Code the trophy to perform an animation.

NOTE: Club members’ code may vary.

Costume for the trophy sprite:



```

when clicked
  go to x: 189 y: -75

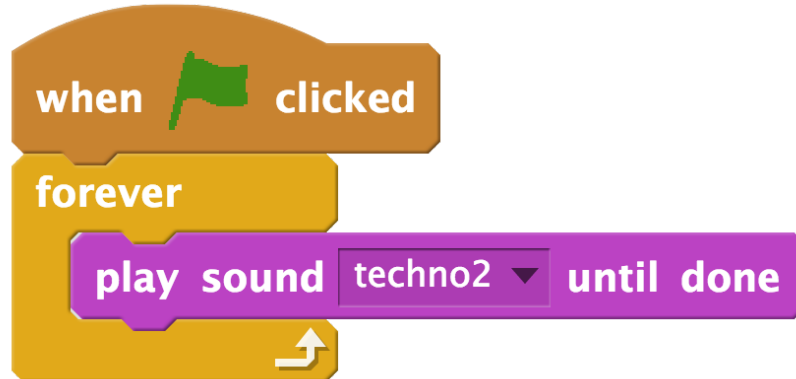
when I receive trophy
  go to front
  glide 1 secs to x: 17 y: 30
  repeat 10
    turn 15 degrees
    move 10 steps
  say The End for 2 secs
  
```

Add-On: Applause/ Music Loop (Challenge)

In this video, club members will:

1. Add a music loop or applause to the program.

Costume for the
model sprite:



Add-On: Glimmering Backdrop (Challenge)

In this video, club members will:

1. Make the backdrop flash colors.

Backdrop for the
stage:

