

Assignment - 10 Blocks.pdf

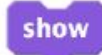
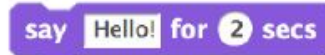
# 10 BLOCKS

WHAT CAN YOU CREATE WITH ONLY 10 SCRATCH BLOCKS?

Create a project using only these 10 blocks. Use them once, twice, or multiple times, but use each block at least once.

### START HERE

- Test ideas by experimenting with each block.
- Mix and match blocks in various ways.
- Repeat!



### FINISHED?

- Test ideas by trying out different block combinations. Mix and match blocks until you find something that interests you!

- + Add your project to the 10 Blocks Studio: <http://scratch.mit.edu/studios/475480>
- + Play with different sprites, costumes, or backdrops.

### Assignment - You Scratch Creation.pdf



# ABOUT ME

HOW CAN YOU COMBINE INTERESTING IMAGES AND SOUNDS TO MAKE AN INTERACTIVE COLLAGE ABOUT YOURSELF?

Experiment with sprites, costumes, backdrops, looks, and sounds to create an interactive Scratch project – a project that helps other people learn more about YOU and the ideas, activities, and people that you care about.



## BLOCKS TO PLAY WITH FINISHED?

when clicked

when this sprite clicked

when space key pressed

move 10 steps

go to x: 0 y: 0

glide 1 secs to x: 0 y: 0

say Hello! for 2 secs

change color effect by 25

change size by 10

show hide

play sound meow until done

wait 1 secs

repeat 10

forever

- + Add your project to the About Me Studio: <http://scratch.mit.edu/studios/475470>
- + Challenge yourself to do more! Play with adding new blocks, sound, or motion!
- + Help a neighbor!

## START HERE

- Create a sprite.
- Make it interactive.
- Repeat!

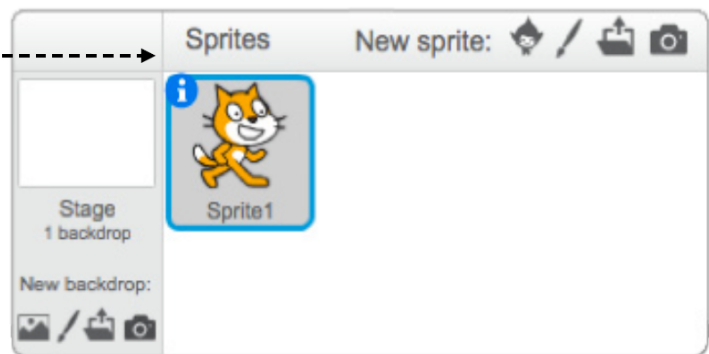
```

when this sprite clicked
  play sound whoop until done
    
```

```

when this sprite clicked
  repeat 10
    turn 15 degrees
    wait .3 secs
    turn 15 degrees
    wait .3 secs
    
```

Make your sprite interactive by adding scripts that have the sprite respond to clicks, key presses, and more!



## THINGS TO TRY

- Use costumes to change how your sprite looks.
- Create different backdrops.
- Try adding sound to your project.
- Try adding movement into your collage.

# MUSIC VIDEO

HOW CAN YOU COMBINE ANIMATION WITH MUSIC TO CREATE YOUR OWN SCRATCH-INSPIRED MUSIC VIDEO?

In this project, you will explore ideas related to theatre, song, dance, music, drawing, illustration, photography, and animation to create a personalized music video!



## BLOCKS TO PLAY WITH

## FINISHED?

when  clicked	turn  15 degrees	switch costume to costume1	wait 1 secs
when this sprite clicked	turn  15 degrees	next costume costume #	repeat 10
when space key pressed	if on edge, bounce	switch backdrop to backdrop1	forever
	rest for 0.25 beats	play drum 1 for 0.25 beats	

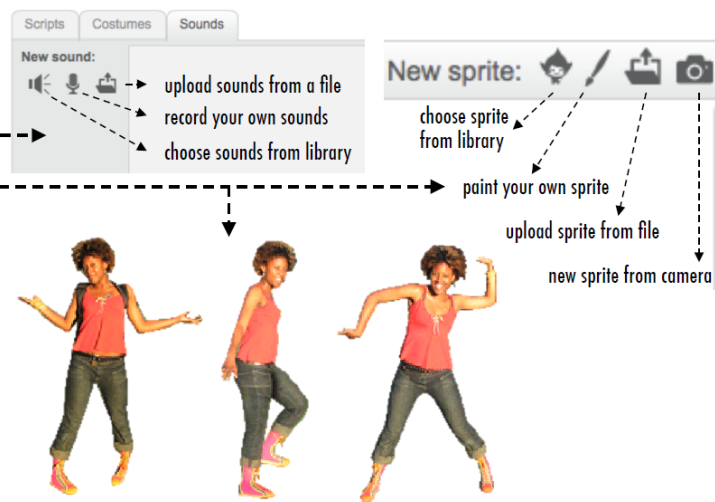
- + Add your project to the Music Video studio: <http://scratch.mit.edu/studios/475517>
- + Be sure to give credit to any music, code, or other work used in your project.
- + Challenge yourself to do more! Create your own sprites, sounds, or costumes!

## START HERE

- Add sound.
- Create and animate a sprite.
- Make them interact together!

```

when this sprite clicked
  change whirl effect by -50
  play drum 2 for .5 beats
  change whirl effect by 50
  play drum 8 for .5 beats
  switch costume to cassy-dancing-1
  play drum 2 for 0.125 beats
  turn 15 degrees
  play drum 6 for 0.25 beats
  turn 15 degrees
  play drum 2 for .25 beats
  switch costume to cassy-dancing-2
  play drum 8 for .5 beats
  
```



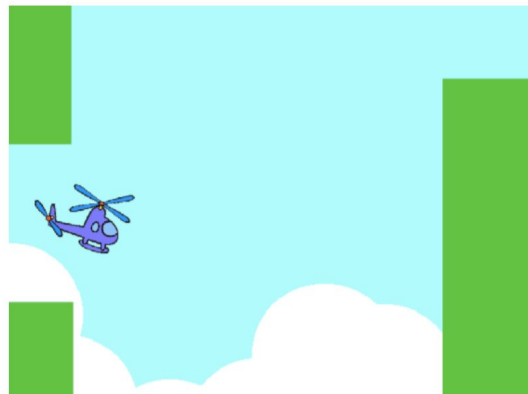
## THINGS TO TRY

- Use costumes to help bring your animations to life!
- Make your sprite interactive by adding scripts that have the sprite respond to clicks, key presses, and more.
- Add instructions on the project page to explain how people can interact with your program.

# SCROLLING

HOW CAN YOU USE SCRATCH TO BUILD AN INTERACTIVE GAME?

In this project, you will create a game. This game includes interactions between sprites, score, and levels. The game is similar to Flappy Bird, where the goal is to keep an object from falling to the ground or touching certain objects.



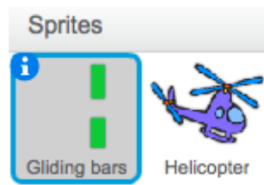
## BLOCKS TO PLAY WITH FINISHED?

when space key pressed	score	-	+	pick random 1 to 10
when up arrow key pressed	set score to 0	<	=	touching ?
when m key pressed	change score by 1	>	not	touching color ?
when I receive message1	show variable score	and		color is touching ?
	hide variable score	or		timer
				reset timer

- + Add your project to the Games Studio: <http://scratch.mit.edu/studios/487504>
- + Swap games with a partner and walk each other through your creations.

**START HERE**

- ❑ Create two sprites: one for the player to control (helicopter) and one to avoid (gliding bars).
- ❑ Make the helicopter interactive.
- ❑ Bring your game to life by adding scripts to make the gliding bars scroll across the stage!



```
when space key pressed
change y by 20
```

Controls sprite movement

```
when clicked
go to x: 0 y: 0
set size to 30%
wait 2 secs
forever
change y by -2
```

Causes sprite to constantly fall downward

**THINGS TO TRY**

- ❑ How do you add difficulty to your game? Creating different levels, using a timer, or keeping score are a few examples of things you could do.
- ❑ Experiment with changing the look of your game by editing the backdrops!
- ❑ Explore using different key presses to control your sprites!

```
when clicked
hide
forever
wait 5 secs
create clone of myself
```

This creates clones, which are used in the script below to make the bars scroll across the screen:

```
when I start as a clone
switch costume to pick random 1 to 3
go to x: 240 y: 0
show
glide 8 secs to x: -240 y: 0
delete this clone
```

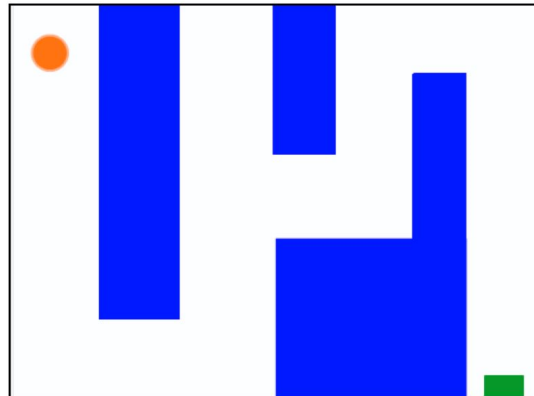
```
when clicked
forever
if touching color ? then
stop all
```

Specifies when the game ends

# MAZE

HOW CAN YOU USE SCRATCH TO BUILD AN INTERACTIVE GAME?

In this project, you will create a game. This game includes interactions between sprites, score, and levels. You move a sprite from the start of a maze to the end without touching the walls.



## BLOCKS TO PLAY WITH FINISHED?

when space key pressed	score	-	+	pick random 1 to 10
when up arrow key pressed	set score to 0	<	=	touching ?
when m key pressed	change score by 1	>	not	touching color ?
when I receive message1	show variable score	and	color is touching ?	timer
	hide variable score	or	reset timer	

- + Add your project to the Games Studio: <http://scratch.mit.edu/studios/487504>
- + Swap games with a partner and walk each other through your creations.



### START HERE

- Draw a maze-like background and use different colors for the walls and end-of-maze marker.
- Add a sprite.
- Make your game interactive!

```

when right arrow key pressed
  point in direction 90
  move 10 steps

when down arrow key pressed
  point in direction 180
  move 10 steps

when left arrow key pressed
  point in direction -90
  move 10 steps

when up arrow key pressed
  point in direction 0
  move 10 steps
    
```

These scripts give the player control over sprite movement in the maze.

### THINGS TO TRY

- Add multiple levels to your game! This can be done through the use of different backdrops and using broadcast blocks to trigger the next level.
- Use the make a variable block to keep score!
- Experiment with timer blocks to add new challenges to your maze!

```

when green flag clicked
  go to x: -205 y: 147
    
```

This tells your sprite where to begin and marks the start of the maze.

```

when green flag clicked
  forever
    if touching color? then
      move -10 steps
    
```

This will cause your sprite to bounce off the blue walls of the maze.

```

when green flag clicked
  forever
    if touching Ball? then
      say You win!
    
```

This tells the end-of-maze sprite that players win when the ball touches this sprite.

## Attachments

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Assignment - 10 Blocks.pdf

Assignment - You Scratch Creation.pdf