

PERSEUS & THE GORGONS

Scratch Coding Tutorial





MARCH 13, 2017
WOODLEY COFE PRIMARY

Perseus and The Gorgons

The Sprites for the game

Sprites

New sprite:

You Lose

Medusa 1

Perseus 1

Medusa 2

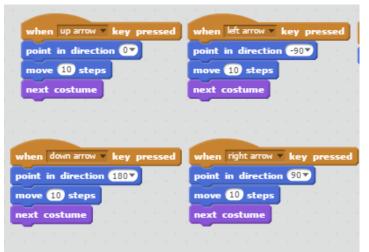
Medusa 3

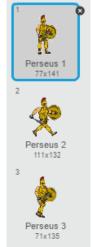
YouLose

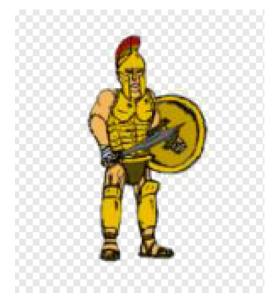
YouLose

Perseus Code

To make Perseus move and switch costume







TIPS

Perseus has 3 costumes to make him look like he is running when the arrow keys are pressed.

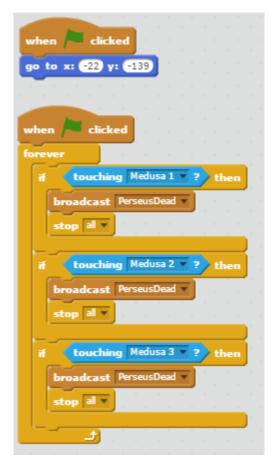
IDEAS:

If you have time at the end, you could replace these costumes with your own drawings/photos.

MORE PERSEUS CODE

To put Perseus in the right place at the beginning of the game.

To make Perseus BROADCAST when he touches any of the Medusas



ONCE THE GREEN FLAG IS CLICKED,
FOREVER IF PERSEUS TOUCHES THE SPRITES
CALLED MEDUSA THEN BROADCAST
'PERSEUS DEAD' AND STOP ALL THE CODE
FOR THE WHOLE GAME

IDEA: WHAT WILL YOU NEED TO DO IF
YOU ADD MORE MEDUSAS?

Medusa Code



```
when clicked

set speed to 3

set score to 0

forever

move speed steps

if on edge, bounce

when clicked

forever

next costume

wait 0.2 secs
```

Medusa has 2 variables: 1 to control the speed of her movement and 1 to set/change the score.

THE FOREVER LOOP MEANS THAT IF SHE HITS
THE EDGE OF THE SCREEN THEN SHE WILL
BOUNCE BACK THE OTHER WAY.

SHE ALSO FOREVER SWITCHES COSTUME EVERY **0.2** SECONDS.

```
when this sprite clicked
hide

change score v by 1

when clicked

forever

go to x: 200 y: pick random 200 to 200

show

wait pick random 3 to 5 secs

hide

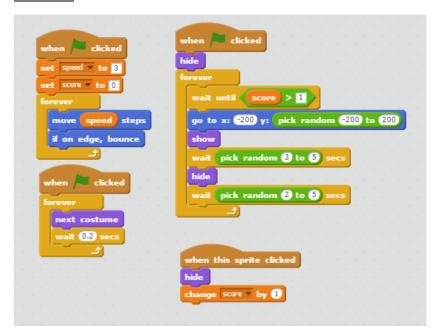
wait pick random 2 to 5 secs
```

THIS CODE MEANS THAT <u>IF</u> SOMEONE CLICKS
A MEDUSA THEN SHE WILL 'HIDE' AND THE
SCORE VARIABLE WILL INCREASE BY 1

THE NEXT BLOCK OF CODE MEANS THAT WHEN SHE APPEARS SHE GOES TO THE FAR LEFT OF THE SCREEN AND PICKS A RANDOM Y AXIS POINT BEFORE SHE APPEARS.

As she crawls she 'shows' and 'hides', randomly, every 2 to 5 seconds.

Medusa 2



THE SECOND MEDUSA IS
VERY SIMILAR, EXCEPT SHE
WAITS UNTIL THE SCORE
IS GREATER THAN 1
BEFORE SHE APPEARS.





WHEN THE GAME STARTS HIDE

WHEN PERSEUS BROADCASTS THAT HE IS 'DEAD' THEN SHOW AND STOP ALL CODE.



FINALLY

THE SHIELD HAS 3 COSTUMES WHICH FOREVER SWITCH.

IT ALSO HAS SOME CLEVER CODE TO KEEP PERSEUS HAVING TO RUN FROM THE TOP TO THE BOTTOM. SEE IF YOU CAN EXPLAIN THIS TO YOUR FRIEND.

So are you finished?

Here are some more ideas so you can advance your game:

| <u>Challenge 1</u> | <u>Challenge 2</u> | <u>Challenge 3</u> |
|--|---|--|
| - Draw new/replace sprites - Duplicate and make more Medusas (Don't forget to change when they appear) - Make Perseus faster | - Make the Medusas get faster as coins are collected Make new beasts which behave differently than Medusa - Make it 2 player using the keys a,w,s,d to control player 2 | - Give Perseus a spear so that he can throw it at the Gorgons - Make a High Score System - Have other levels by changing the background and showing new sprites. |