## Scratch 'Ghostbusters / Alienbusters' for Scratch 1.4

Based on RPF 'Ghostbusters' for Scratch 3

- Suitable backdrop
  - Click stage
  - Click backgrounds
  - Click import
  - Click Nature
  - moon is a good one, pick what you'd like
  - \*Might not load jpg's, try stars or underwater
  - Delete the blank one
- Get rid of Scratch Cat
  - Right click on the sprite
  - Delete
- New sprite
  - Click new sprite from file
  - Click on Fantasy
  - Pick one that looks like a funny alien
  - Name your sprite alien\_1
- Want the alien to go to different random places
  - Add when green flag clicked
  - $\circ \quad \text{Add go to x y} \\$
  - In each add pick random number *explain "pick random"*
  - X = -240 to 240
  - Y = -180 to 180
  - "It works once...but we want it to happen over and over, get the computer to do this with a loop"
  - Add a forever loop

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when 🛤	clicked
forever	
go to x:	pick random -240 to 240 y: pick random -180 to 180)

• Now its moving too fast, won't be able to click on it!

- Add wait 1 second
- Change the timings to suit!

	when 🛤 clicked
	forever wait 1 secs
0	go to x: pick random -240 to 240) y: pick random -180 to 180

- Need the alien to appear and disappear
  - Add hide before the wait
  - "Oh no, my alien has disappeared!"
  - Need a show block after the go to x y
  - "That should work now right.....oh no!"

	when A clicked
	forever
	hide wait 1 secs
	go to x: (pick random -240) to 240) y: (pick random -180) to 180)
	show
0	

- Need a pause before the alien hides again
  - Add wait after the show
  - "That's more like it, but we can guess when the alien is going to appear, lets make it random"
  - Add pick random to last wait block, 1-2 seconds, change to suit

when 🛤 clicked
forever
hide
wait 1 secs
go to x: pick random -240 to 240 y: pick random -180 to 180
show
wait pick random 1 to 2 secs

Alien is too big

0

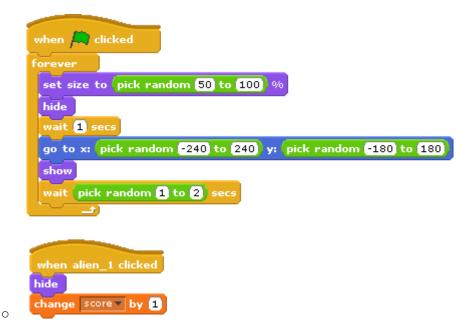
- "Alien is quite big, quite easy to splat it! Lets make it more difficult by changing the size"
- Add set size above the hide
- Add in random 50 to 100

when 🛤	clicked				
orever					
set size	to (pick rand	om 50 to 100	0 %		
hide					
wait 1	ecs				
go to x:	pick random	-240 to 240	) y: (pick	random 🖃	180) to (18
show					
wait pic	k random 1	to 2 secs			
·					

• Need to track how many times we click

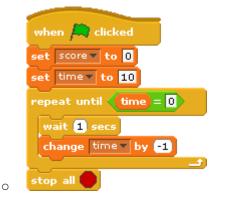
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- "So now we've got our alien working the way we want, now we need a way to keep score!"
- "Going to use something called a variable" *explain variables*
- Click variables, make variable, for all sprites, scorename score
- "See score is at the top and is 0, that means nothing has been put in the variable"
- "Now we need the score to change when the click on / splat the alien"
- Add when robot clicked block
- $\circ$  "We need the computer to add 1 to the score every time we click"
- Add change score by 1
- Add hide before change score



- Need to add a timer
  - "Games like this need a time otherwise they never end, click on stage this time"
  - Create a new variable and call it time
  - Add when green flag clicked
  - Explain difference between 'change' and 'set'

- Add set time to 10
- "Now we need the timer to count down"
- Explain repeat until and time = 0
- Add repeat until time = 0
- Add change time by -1
- "Oh no, time went too fast!"
- Add wait 1 second before change time
- "At the end of the script, we want everything to stop"
- Add stop all after the loop
- "Score keeps getting higher, need that to reset!"
- Add set score to 0 after green flag



- Need to duplicate and change the sprite
  - "We want another alien but don't want to rewrite all the code"
  - Right click sprite
  - Duplicate
  - Show all the code is still there
  - Give a new name
  - Change costume
- Other things they can do
  - $\circ$   $\;$  If the game is too hard can you slow it down
  - Stop the alien appearing in space (max y value 90)
  - Keep a score for each alien?
  - Game over screen?
  - Change alien costume when clicked?