



After-School Lesson Plan

Zombie Blast

Game summary: Capture as many zombies as possible before they get you first.

Sample Game: <https://play.codecampworld.com/play.html?game=GFPJLDA>

Video Tutorial: <https://youtu.be/3jOnGwcOZ4>

Create Project

Create Project



Name *

Zombie Blast

[Need a suggestion for your project name?](#)

Type *

2D Game

Mode *

Block coding

Add Scene

Scaling mode needs to be set to 'Show entire scene' to ensure the game works on all devices.

Add Background

Add Scene

Name

Cells Across

Cells Down

Cancel

Add

Properties for Level 1

Cells Across

Cells Down

Scaling Mode

Cancel

Save

Backgrounds

No tiling ▼

Fastest, fit back ▼



Yard4



Yard3



Yard2



Yard1



Water Background



Sydney Skyline Sunset

Add Aim actor and Animations

Add Actor

Name

Cancel

Add

lightening shield1

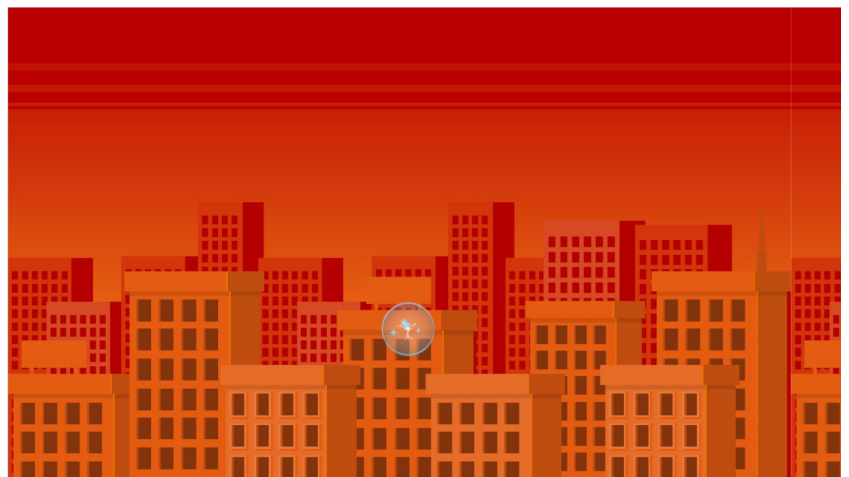


Animation Frames

Click on a frame to include it, click again to turn it off



Drag the corners of the box to set the collision area



Add Move function to Aim

Scale the speed depending on the size of the scene. 0.003 is a safe scaling option in terms of frame rate and speed.

Add Function

Type

When this actor is updated ▼

Name

move

Cancel

Add

When this actor is updated (RUNS ALWAYS)

if is Mouse down then do the following:

Move this towards mouse at speed

0.003

*

scene width in pixels

*

scene height in pixels

else do the following:

Move this towards mouse at speed

0

Add Firework actor and Animation

Resize the collision box based on the chosen animation.

Add Actor

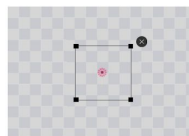
Name

Firework

Cancel

Add

firework1



Drag the corners of the box to set the collision area

Animation Frames

Click on a frame to include it, click again to turn it off



Add Attack function to Aim

Add Function

Type

When this actor is clicked on ▼

Name

attack

Cancel

Add

When this actor is clicked on

Create new Firework ▼ at x

x of

this

y

y of

this

Set whether

last created actor

is a sensor to

yes ▼

Play sound SFX Powerup 5 ▼

Add Animation function to Firework

Add Function

Type

When this actor is created ▼

Name

animation

Cancel

Add

When this actor is first created (RUNS ONCE)

Set

this

to

Play ▼

animation with name

firework1 ▼

Add Remove function to Firework

Add Function

Type

After X seconds ▼

Name

remove

Cancel

Add

After

0.5

seconds

Remove

this

Add Zombie actor

Remember to adjust the collision box and place at least five actors on level 1.

Add Actor

Name

Zombie

Cancel

Add

Frankenstein 2



Drag the corners of the box to set the collision area

Animation Frames

Click on a frame to include it, click again to turn it off



Add Setup function to Zombie

Add Function

Type

When this actor is created ▼

Name

setup

Cancel

Add

When this actor is first created (RUNS ONCE)

Set scale for **this** to x **0.2** y **0.2**

Set whether **this** is a sensor to **yes** ▼

Set X speed to random number between **-500** and **500** for **this**

Add Magnify function to Zombie

Increase scale when targeted and then return to original size after a short period.

If the Zombie is not caught within a specified period after being hit, then the player loses the game. You will need to create the Game Over scene to be able to complete this section of the function.

Add Function

Type

When this actor hits another ε ▾

Name

magnify

Cancel

Add

When this actor hits a

Aim ▾

Set scale for **this** to x **1** y **1**

do after ▾ **0.5** seconds:

Set scale for **this** to x **0.2** y **0.2**

do after ▾ **4** seconds:

Go to scene with name **game over**

Set points to **0**

Add Game Over scene

Add Scene

Name

game over

Cells Across

20 ▾

Cells Down

15 ▾

Cancel

Add



Add Start function to Game Over scene

Add Function

Type

When this scene is clicked

Name

start

Cancel

Add

When this scene is clicked

Go to scene with name

Level 1

Add Change Direction function to Zombie

Add Function

Type

Every X seconds

Name

change direction

Cancel

Add

Every

3

seconds

Set X speed to

xSpeed of

this

*

-1

for

this

Add Points game variable

This is used to count how many Zombies have been defeated

Add Variable

Name

points

Default

0

Cancel

Add

Owner Variables

this actor

Game Variables

last created actor

collided with

next loop item

Get 'points'

Set 'points'

Actor

Scene

Logic

Maths

Variables

Input

UI

Sounds

Custom

Add Take Damage function to Zombie

Note - Aim is used to magnify the zombie and firework is used to damage the zombie. There will need to be at least as many Zombie actors on each level as the number used in the if statement.

Add Function

Type

When this actor hits another ε ▼

Name

take damage

Cancel

Add

When this actor hits a

Firework ▼

Remove collided with

Remove this

Set points to

points + 1

if points >= 5 then do the following:

Go to next scene

Set points to 0

Add Level 2 (and more)

Can change the size of each level to alter the difficulty. There needs to be one Aim actor and at least five Zombie actors on each level. All levels will need to have the 'Show entire scene' property set up.

Add Scene

Name

Level 2

Cells Across

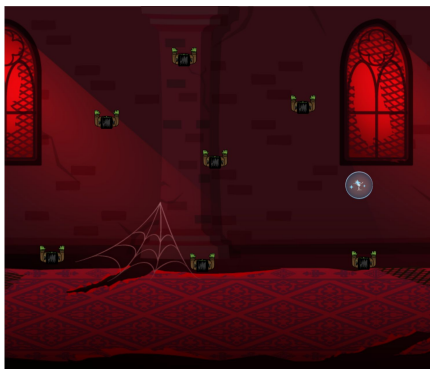
35

Cells Down

30

Cancel

Add



Properties for Level 2

Cells Across

35

Cells Down

30

Scaling Mode

Show entire scene ▼

Cancel

Save

Add Show Points function to Aim

Add Function

Type

When this actor is updated ▾

Name

show points

Cancel

Add

When this actor is updated (RUNS ALWAYS)

Show a label called **points** at **10** and **10** with text

Zombies Captured:

&

points

&

/5

Set background color for label **points** to **#c7f6c7** ✖

Add Win scene

Make sure to reorder the scenes so that they are in order (Win before Game Over, but after the last level)

Add Scene

Name

Win

Cells Across

20

Cells Down

15

Cancel

Add



game over



win

Set as starting scene

Test Scene

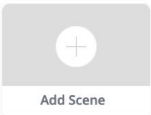
Rename

Move left

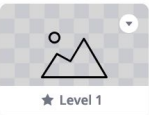
Move right

Delete

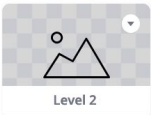
Scenes (4)



Add Scene



★ Level 1



Level 2



win



game over

Add Start function to Win scene

Add Function



Type

When this scene is clicked ▾

Name

start

Cancel

Add

When this scene is clicked

Go to scene with name

Level 1

All Done!