

Enemies with Intelligence

Creating AI

Play Will's version:
[click](#)

Today's Game

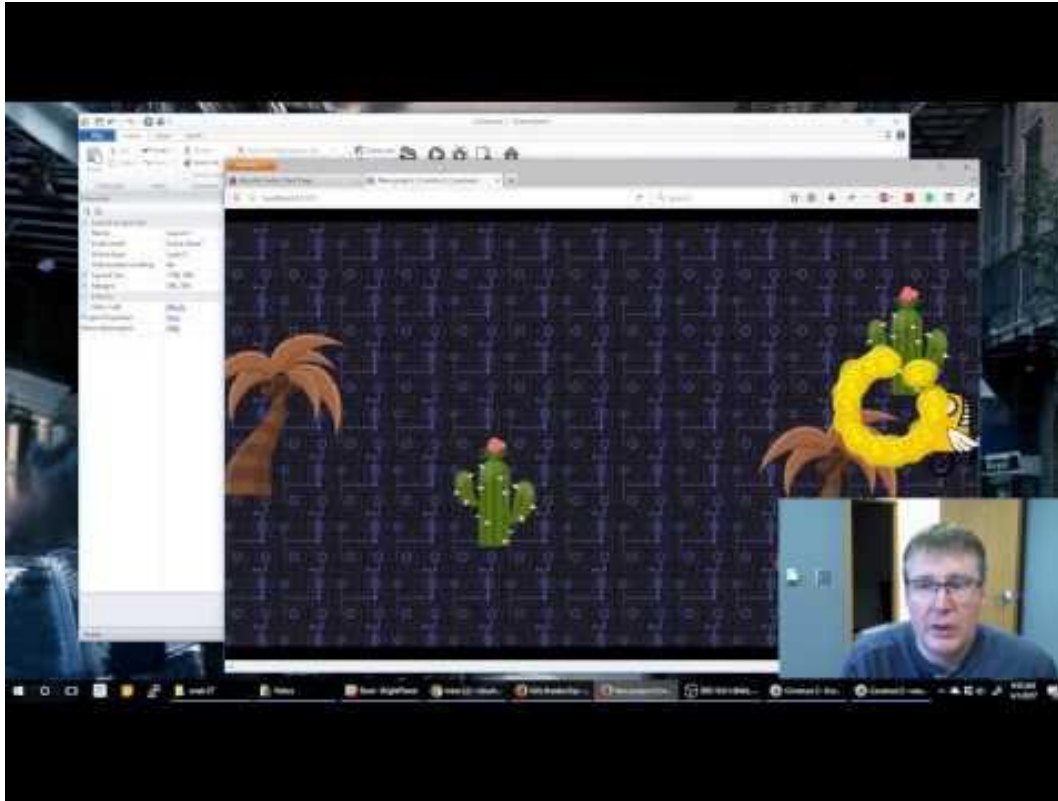
Challenge: Build a game that includes enemy artificial intelligence that chase our hero.

Goal: Build your own game that incorporates an enemy AI. Be creative!

Features:

- One hero
- Multiple enemies with AI
- Some goal (collect coins, kill enemies, etc.)

Walkthrough Video (It's amazing!)



<https://youtu.be/mwi0pQB9Eog>

Setup Layout & Sprites

- Create a background
- Create a Sprite for your hero & enemy
- Create obstacles (cactus & trees)




Behaviors

- Hero gets:
 - **8-Direction, Scroll-To, and Wrap**
- Enemy
 - **Pathfinding**
- Obstacles
 - **Solid**








Adding Events

- Every 1 second, have the enemy find a path to our hero
- While a path has been found, move along the path

1	 System	Every 1.0 seconds	 enemy	Find path to (<i>hero.X, hero.Y</i>)
			Add action	
2	 enemy	On  Pathfinding path found	 enemy	Move along path
			Add action	

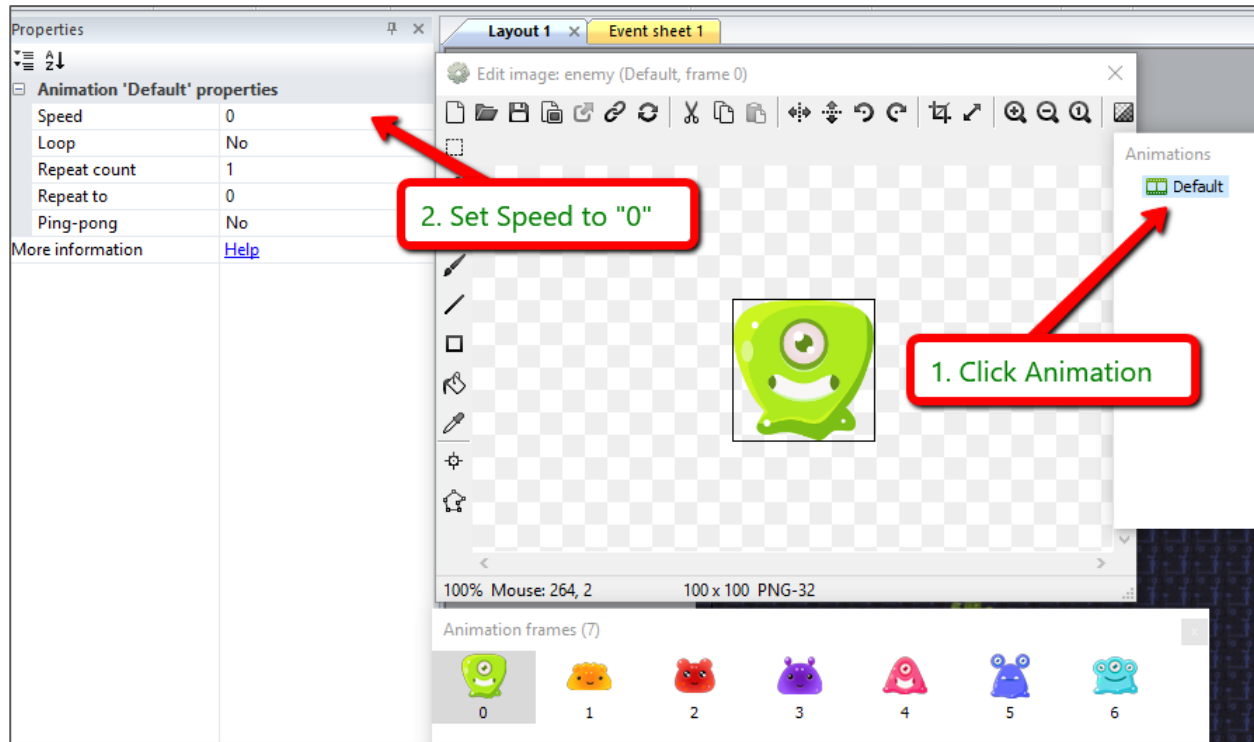
Adding Coin

- Add a coin and particles
- Spaw a coin randomly around the layout every 2 seconds
- Allow the hero to collect coins

3	 System	Every 2 seconds	 System	Create object  coin on layer 0 at $(random(0,1700), random(0,900))$
			Add action	
4	 hero	On collision with  coin	 coin	Spawn  Particles on layer 0 (<i>image point 0</i>)
			 coin	Destroy
			Add action	






Add Enemies

- Load ALL frames into the enemy Sprite
- Set “Speed” to “0”














Auto Spawn Enemies

- Every 10 seconds, randomly spawn an enemy

5	 System	Every 10 seconds	 System	Create object  enemy on layer 0 at (<i>random(0,1700)</i> , <i>random(0,900)</i>)
	 System	enemy.Count ≤ 5	 enemy	Set animation frame to random(0,8)
			Add action	

Create a Bullet to Shoot Enemies

- Add a bullet sprite
 - Include bullet behavior
- Add the Keyboard
- Add particles for enemy

6	 Keyboard	On Space pressed	 hero	Spawn  bullet on layer 0 (<i>image point 1</i>)
			 bullet	Set  Bullet angle of motion to <i>hero.8Direction.MovingAngle</i> degrees
			Add action	
7	 bullet	On collision with  enemy	 enemy	Spawn  Particles2 on layer 0 (<i>image point 0</i>)
			 Particles2	Set angle to 270 degrees
			 enemy	Destroy
			Add action	

Extra Stuff

- Have a door appear after 30-seconds which takes you to level 2
- Add a HUD to track coins
- Enemies can kill you if they catch you
- Enemies can shoot back