Gaming Bootcamp of South Dakota

1

Tanks

Part 2



Play the game we are building: click

Today's Game

Challenge: Build two player tank game where you shoot at each other.

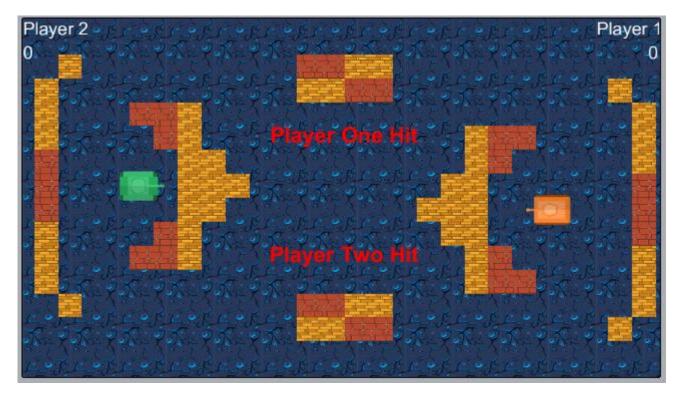
Goal: Shoot your opponent without getting shot yourself.

Features:

- **REVIEW** what you've already learned
- Two tanks, each with their **own controls**
- Keep track of the **score**
- Add a start screen (known as a "splash" screen) with instructions
- Add logic to go to the **next level**
- Add 5 levels, each more difficult than the previous

My Tank Level

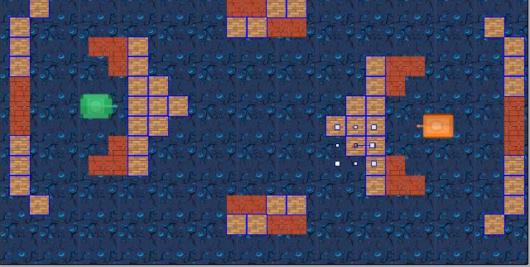
- Set Layout
 Size to
 <u>854,480</u>
- Use the "snap to grid" to layout blocks



Add Background & Blocks

- Use the *TiledBackground* for the ground
- Use Sprites for the two blocks
 - Both blocks get Solid behavior
 - Layout individual blocks
- Use *Sprite* for TWO <u>tanks</u>
 - Uses the *solid, car* &
 Wrap behaviors
 - Adjust the collision points for your tanks





Second Tank Movement (NEW)



- Map DIFFERENT keys for the second tank
- Turn off "Default Controls"
- Add <u>Events</u>

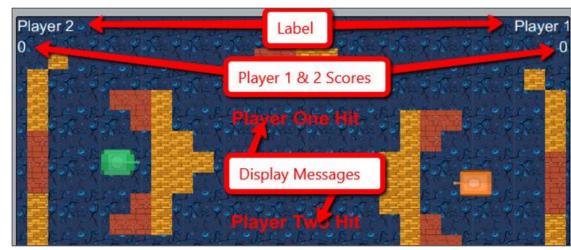
□ Car Max speed 350 Acceleration 200 Deceleration 300 Steer speed 225 Drift recover 185 Friction 0.4 Set angle Yes
Acceleration 200 Deceleration 300 Steer speed 225 Drift recover 185 Friction 0.4
Deceleration 300 Steer speed 225 Drift recover 185 Friction 0.4
Steer speed 225 Drift recover 185 Friction 0.4
Drift recover 185 Friction 0.4
Friction 0.4
Set angle Vec
Default controls No
miliai stale chapieu
Wrap
Wrap to Layout

		Add action		
🚟 Keyboard	W is down	PlayerTwo	Simulate 💥 Car pressing Accelerate	
		Add action		
🚟 Keyboard	A is down	🔛 playerTwo	Simulate 💥 Car pressing Steer left	
		Add action		
Keyboard 🚟	S is down	🔛 playerTwo	Simulate 🦹 Car pressing Brake	
		Add action		
Keyboard	D is down	playerTwo	Simulate 🤾 Car pressing Steer right	
		Add action		
Keyboard 🚟	On F pressed	PlayerTwo	Spawn 🥌 bullet on layer 0 (image point 1)	
		Add action		

NOTICE: The "fire" event is using "On key pressed"!!

Add Score & Messages (NEW)

- Player labels
- Player scores (Set to "<u>0</u>")
- Display Messages
 - Set "Initial Visibility"
 to "Invisible"
 - Add <u>Fade</u>
 - Set "Activate on Start to "<u>False</u>"



Gaming Bootcamp

NAME YOUR OBJECTS

Display Events (NEW)

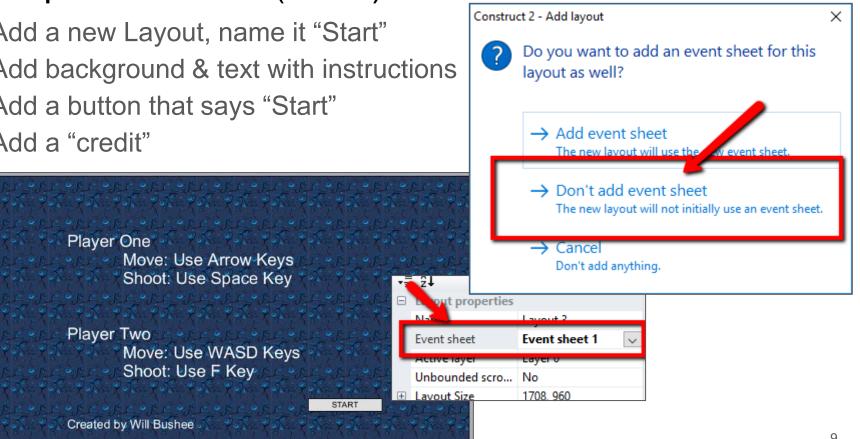
- Start the Fade messages
- Adjust the **Score** on collisions (Your text value may be different!)
 - Example: <u>int(playerTwoScore.Text)+1</u>

4	🕈 🗢 bullet	On collision with	 bullet 	Destroy
			T playerOneHit	Set Visible
			T playerOneHit	Fade: restart fade
			T playerTwoScore	Set text to int(playerTwoScore.Text)+1
			Add action	
5	🕈 🗢 bullet	On collision with b	 bullet 	Destroy
			T playerTwoHit	Set Visible
			T playerTwoHit	Fade: restart fade
			T playerOneScore	Set text to int(playerOneScore.Text)+1
			Add action	

Add Splash Screen (NEW)

- Add a new Layout, name it "Start"
- Add background & text with instructions
- Add a button that says "Start"
- Add a "credit"





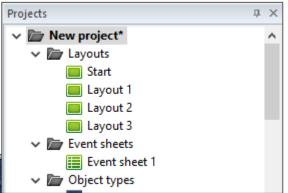
Shoot: Use F Key

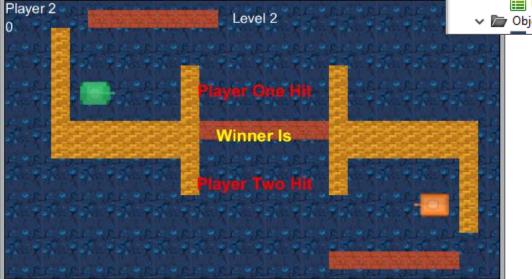
Player Two

Add Multiple Levels (NEW)

- Add 3 new levels
 - Use the "Duplicate" option
- The order of the levels is IMPORTANT
- BE CREATIVE!







Changle Levels (NEW)

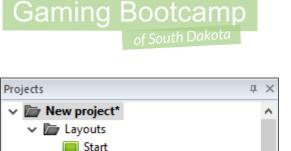


- When a player gets 15 points, go to the next level
- Display a message about who won

			Add action	
13	🗱 System	int(playerOneScore.	T winnerMsg	Set Visible
		text) > 15	T winnerMsg	Set text to "Winner is Player One!"
			🗱 System	Wait 3 seconds
			🗱 System	Go to next layout
			Add action	
14	System int(playerTwoScore. text) > 15	1 N N N	[T] winnerMsg	Set Visible
		T winnerMsg	Set text to "Winner is Player Two!"	
			🗱 System	Wait 3 seconds
			🗱 System	Go to next layout
			Add action	

Add a Game Over Layout

- Just like the Start layout
- Remember, the order is important!







Additional Challenges

- Have the blocks move with the **Sine** behavior
- Add a start screen
- Add multiple levels