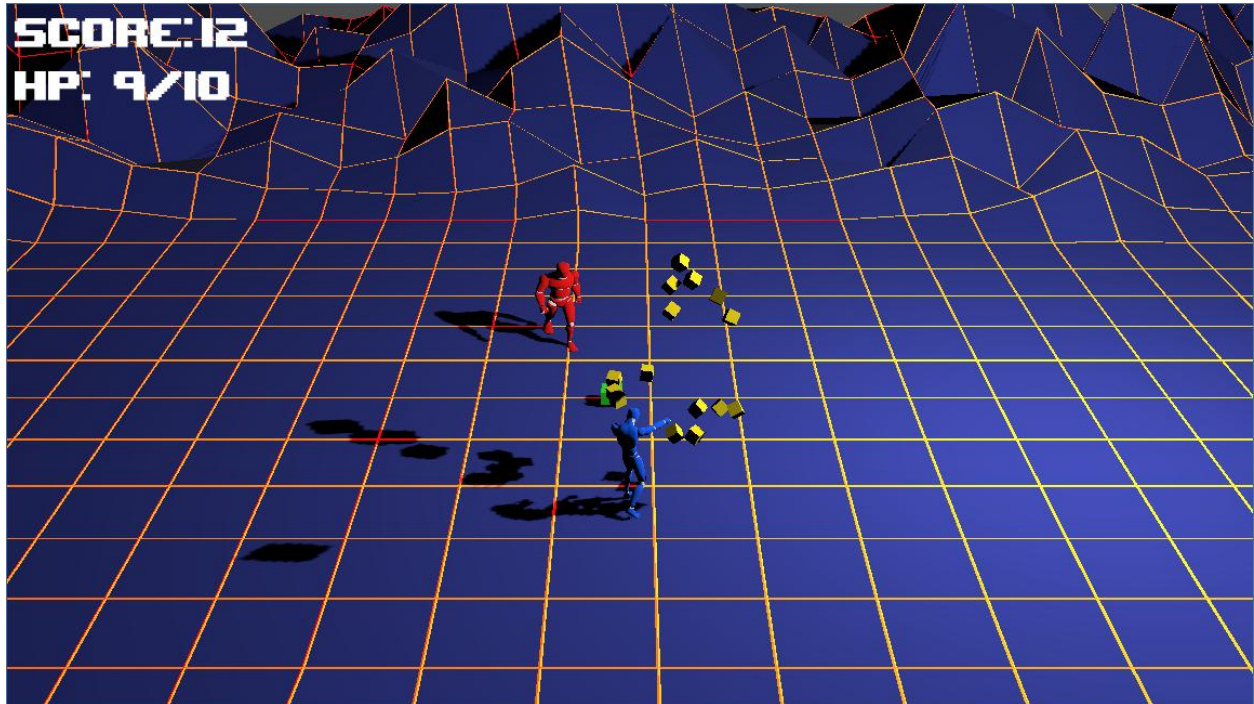




Activity 10 Prove Yourself: Cyber Fu Extended

PROVE YOURSELF: CYBERFU EXTENDED

For this Prove Yourself, add a cube explosion effect for the player and enemies! Use your understanding of **Instantiating Scenes** and **RigidBodies** to create cubes when the player or enemies are defeated!



Open the **Cyber Fu Part 2** project. Explore how to do the following:

- 1 Navigate to the **player.gd** script.
- 2 Create an **@export** variable to represent the **explosion_cube** scene. This will be instantiated later to create the cubes.
 - *What node type is needed to contain a scene?*
 - *Set this to **explosion_cube.tscn** in the Inspector before moving on.*
- 3 Create a new function which will create the explosion effect and give it an appropriate name.
- 4 In the new function, create a **for** loop to instantiate the cube scene.
 - *When setting how many times this loop will run, keep in mind visuals and performance. Running the loop too many times will cause lag and running it too few times won't create an impactful effect!*
- 5 Inside the loop, instantiate the cube scene as a variable.
- 6 Set the cube's starting position. Using a y value of 1 will be roughly the enemy's fist height.
 - *If all the cubes start in the exact same spot, the effect may look too unnatural. However, if they aren't overlapping, they won't explode outward. How might the cubes be positioned randomly to create this effect?*
- 7 Give the cube a random starting speed using **apply_central_impulse()**.
 - *Tinker with different values to determine an appropriate speed.*



Reminder:

The **apply_central_impulse()** method gives an instant kick to an object's center. It takes a **Vector3** as an argument to define the kick.

- 8 Add the cube to the scene tree.
 - *Would the cube behave better if it was added as a child or as a sibling to the **Player** node?*
- 9 Call the explosion function when the player is defeated, but before the game over UI appears.
 - *Look through the order of steps in the function that runs when the player is defeated to determine where to call the explosion function.*
- 10 Playtest the game and check to see that the explosion effect appears when the player is defeated.
 - *Tinker with the values to customize the explosion!*
- 11 Copy the code from this activity into **enemy.gd**.
 - *Be sure to copy the code from all 3 places edited in **player.gd**, and set the enemy's cube scene variable in the inspector!*
- 12 Playtest again and see the explosion effect appear when the enemies are defeated too!

Congratulations on completing **SB Activity 10: CyberFu Part 2** and **Prove Yourself: CyberFu Extended** in Godot – you rock!

Continue your exploration with Godot by opening the **SB Activity 11: Labyrinth** Ninja Guide.