# Third Person Game Mechanics

In this lesson students learn about third person player characters and add controller and collider components to create gameplay actions.

## Objective

Students will be able to:

* Add a third person controller to a player GameObject
* Add collider components to a GameObject
* Create a basic UI that displays a score on the canvas

[Video - Third Person Game Mechanics](https://youtu.be/wIkcRRAs49A)

## Tutorial 1: Meet Ethan

Complete Tutorial 1: Meet Ethan. Then, answer the following questions:

What is the name of your project?

What was easy about using the third person controller? What was challenging?

If you were creating a game that takes place in outer space, how might you change the variable values?

## Tutorial 2: Meet Ellen

Complete Tutorial 2: Meet Ellen. Once completed then, answer the following questions:

What was easy about hooking Ellen up to the third person controller? What was challenging?

Now that you know how to change the character of the third person controller, how might you use this in a future game?

## Tutorial 3: Object Collection Mechanics

Complete Tutorial 3: Collecting Objects Game Mechanics. Once completed, answer the following questions:

What was easy about adding the object collection game mechanic? What was challenging?

How could you make the object collection game mechanic more challenging?

## Make It Your Own Challenge

Now that you know all about the third person controller and collecting objects, it’s your turn to use these skills to make your own mini-game!

At a minimum, you must complete the following steps:

* Scene: Find the MakeItYourOwn scene in the Scenes folder. Double click this scene and it should appear in the hierarchy window.
* Character: Go to the Assets Store and download the Human Characters (FREE Sample Pack) package. Remove Ellen and hook up the third person controller to one of the models in this package.
* Objects to Collect: Ensure that all objects to collect have a collider component, do not have a rigid body component, and have the script ObjectsToCollect component.
* Enhance gameplay: Complete the following tasks to make your game more fun and engaging for users:
  + Position the cubes so that the game is more challenging.
  + Add more cubes to make the game last longer.

Once you have completed your game, answer the questions.

1. What model did you choose for your character?

2. How did you position the cubes to make the game more challenging?

3. How many cubes did you add to make the game last longer?

4. Did you make any additional changes? If so, describe them below.

Extensions:

* Go to the Asset Store and choose a different object to collect. Try looking for things like gems, icons, or game items.
* Change the physical landscape by adding objects.
* Go into the CountObjects script and see if you can change the text that appears once the character has collected all of the objects. Note: You will need to use Visual Studio to make changes to the code.
* Create two types of objects to collect. Perhaps one is pink and the other is blue. Create a second Text gameobject so that the user can keep track of the number of both object types.