

# COMP2007 - Game Development

## Basic Scripting Exercise

Add code to make the Ball character's Rigidbody rotate and jump from user input

### Setup

Open the scene **Simple Physics EXERCISE**

Search for and open the **ControllerEXERCISE** script from the Project panel

The file contains instructions for each task and where to place the code answers.

Here is a rundown of the tasks from the file

### Task 1

Get the Rigidbody component

At the bottom of the Start method use GetComponent to get the Rigidbody component and assign it to the field named "body"

Look at the documentation link below for instructions on using GetComponent

<https://docs.unity3d.com/2021.2/Documentation/ScriptReference/Component.GetComponent.html>

### Task 2 a and b

In the Update method, Get the Horizontal and Vertical Input from Unity's Input Manager

Look at the.GetAxis method link below for instructions

<https://docs.unity3d.com/2021.2/Documentation/ScriptReference/Input.GetAxis.html>

inputs are set from the editor (Edit -> Project Settings -> Input Manager)

<https://docs.unity3d.com/2021.2/Documentation/Manual/class-InputManager.html>

### Task 3

In the Update method, Add the torque variable to the Rigidbody component using AddTorque

Look at the AddTorque method link below for instructions

<https://docs.unity3d.com/2021.2/Documentation/ScriptReference/Rigidbody.AddTorque.html>

### Task 4

In the Update method, get the Fire1 Button Input from Unity's Input Manager

Look at the GetButton method link below for instructions

<https://docs.unity3d.com/2021.2/Documentation/ScriptReference/Input.GetButton.html>

inputs are set from the editor (Edit -> Project Settings -> Input Manager)

<https://docs.unity3d.com/2021.2/Documentation/Manual/class-InputManager.html>

### Task 5

In the Update method, Add the jumpForce variable to the Rigidbody component using AddForce

Look at the GetButton method link below for instructions

<https://docs.unity3d.com/2021.2/Documentation/ScriptReference/Rigidbody.AddForce.html>

Use ForceMode.Impulse as the second parameter

<https://docs.unity3d.com/2021.2/Documentation/ScriptReference/ForceMode.html>