

# GameDev McGill Intro Tutorial

## Overview

This tutorial is intended for beginners with little to no experience using Unity. The objective is to get familiar with Unity's basic concepts and functionality by following a basic tutorial and then expanding upon it, creating a simple 3D game.

**DEADLINE: Friday, October 4nd at 11:59PM EST [EXTENDED]**

**[SUBMISSION FORM](#)**

## Roll-a-Ball Tutorial

First, you need to install Unity ([link](#), this downloads Unity Hub first) and complete Unity's [roll-a-ball](#) tutorial (takes about 1 to 1.5 hours).

All first time members have to do the roll-a-ball tutorial, but will either do the programmer tasks or art/design tasks listed below once you complete the roll-a-ball tutorial. If you plan on programming but will learn art or design on the way, please do the programmer tasks. If you've completed the roll-a-ball tutorial and you are having trouble with the tasks, don't hesitate to contact us at [gamedev.tech@mcgilleus.ca](mailto:gamedev.tech@mcgilleus.ca) or visit the technical team at the Factory, Trottier 0080!

Tip #1: Unity's documentation is your friend here. Reading the documentation for a game engine is crucial in learning how to use it. If you ever run into a situation where you want Unity to do something, but you don't know what function to call, use google!

Tip #2: There are multiple ways to complete most of these tasks. Do whatever you think gives the best effect; we are not looking for a specific implementation.

## Programmer Tasks

Choose between tasks 2a and 2b to do, you do not have to do both.

1. **Respawn:** A lot of games in the past have had spots where the player can roll off the map. To ensure that the game doesn't continue after the player has fallen, trigger a restart of the level if the player falls off the map. This means you would also need to include a visible spot in your game where the player could accidentally fall.
2.
  - a. **Random collectable object rotation:** Having all the collectable objects rotate along the same axis in unison looks pretty weird. Make it so the collectable objects do not rotate in unison.

OR

- b. **Cubes face player:** Have the cubes face the player at all times, like they are staring at you.
3. **Improve the level:** The level created in the tutorial is very basic. Edit the level to make it more exciting! (ie. add walls to create a cool level/maze design)
4. **Speed boost patches:** Create a few spots on the map that will cause the player to temporarily roll/move faster than normal. This would be a gameobject in the scene that gives the player a speed boost if they roll over it. Think of the patches in Mario Kart for example.

#### **(BONUS)**

If you've completed all the tasks and you're up for an extra challenge, try to make a turret which shoots at the player. Essentially, the turret would be placed somewhere in the scene and would shoot something at the player and would delete the player if the bullet made impact. There's really no limit/requirement, go nuts.

## Art/Design Tasks

**Improve the level:** The level created in the tutorial is very basic. Edit the level to make it more exciting! For designers, this may be more on the level design side. For artists, add art to the scene. For example artists can add textures, background images, or static objects like trees and rocks. If you only do 2D art, you can try out UI instead!

**Portfolio:** Send a zip of some past art or design sketches you have worked on. They do not need to be game related, but something to show your interest in art or design. If you are still quite beginner, send sketches of what you end up working on for the "Improve the level" task.

## Important Note:

We invite you to submit your project no matter how far you got into it.

However, please note that submission of your project does not guarantee automatic membership in the club (due to limited resources). As such we encourage you to try your best with the assignment and to try to go beyond the limits of the tutorial and customize it to your liking and impress us!