

Exercise – Game Engines

In this exercise you're tasked with researching and comparing the features of the Unity 3D game engine with other similar game engines.

Your answers to these questions can be submitted as part of your assignment.

Research the Unity Game Engine:

Before we begin comparing Unity to other engines, we need to know a bit about Unity.

Go online to the Unity 3D website (<https://unity3d.com/unity/engine-features>) and create a list of the engine's features. You may also want to use Google to help you here.

Make sure you investigate the following areas:

- What orientations are supported (2D/3D)?
- What platforms can you build games for?
- What scripting or programming languages are supported?
- What are the graphical features?
- How is physics handled?
- Is networking supported?
- Are there any cool features, like terrain generation or navigation meshes?
- Is there a large online community or is online documentation available?

Also make a list of the disadvantages of the Unity engine, including:

- How difficult is it to learn?
- How complex is it to use?
- Is it expensive (or cheap, this could be an advantage depending on your point of view)?

Make sure you discuss your lists with your classmates. Other members in your class may have different opinions.

Compare and Contrast:

Select one other game engine, either from the list of engines discussed during the lecture or one of your own choosing.

Compare the features and disadvantages of your chosen engine against the Unity 3D engine. If you choose a 2D engine, compare only the 2D features. Likewise if you choose a 3D engine, compare and contrast only the 3D aspects.

Making a Case for Business:

From your analysis, is the Unity 3D engine an appropriate engine for a game company to use to develop games?

Once you have completed the exercises for the session on “The Video Game Industry”, argue whether or not the Unity engine is an appropriate engine to use in relation to the company goals you identified.

Justify your answer with evidence (write at least 2 paragraphs, a yes or no answer is not acceptable).

Submit your answers with your *Game Development Basics* assignment.