

PCG 24 Hour Assignment

Task 1:

Unreal Engine

One of the most popular game engines of today is Unreal Engine. Unreal Engine uses C++ and can make both 2D and 3D games. One of the most well-known games that was made using this engine is Batman: Arkham Knight.

Godot

Godot is a game engine which uses a variety of languages, such as C# and C++. It is used for both 2D and 3D games, and one of the titles this has made was City Game Studio.

Unity

Unity is one of the most well-known engines in the world. It uses C# and has created many small, and many huge games, such as Beat Saber and Rust. It can be used for both 2D and 3D games.

AppGameKit

AppGameKit is a game engine which uses C++. It is used for 2D and 3D games, and one of the titles which uses this engine is Rush to Adventure.

Cryengine

Cryengine uses multiple languages, C++, Lua and C#. While Cryengine can be used for both 2D and 3D games, it is one of the most visually appealing engines out there, therefore most people find it a waste to make a 2D game. One of the AAA games made using Cryengine was Sniper: Ghost Warrior 3.

Task 2:

a)

GIF

A GIF file (Graphical Image Format) is a file which can be used to make an animation. It is one of the few image files which can be used to do this.

JPG

JPG (Joint Photographic Group) is a file format which is usually used on google images. It is a raster file.

PNG

PNG (Portable Network Graphics) is a lossless file format. It is also found on google images, however, due to it being lossless, it is not as common as a JPG file.

b)

MP3

MP3 is one of the most known audio formats used. It is a lossy audio format, therefore it can be stored without having to worry about needing too much space for a single song.

WAV

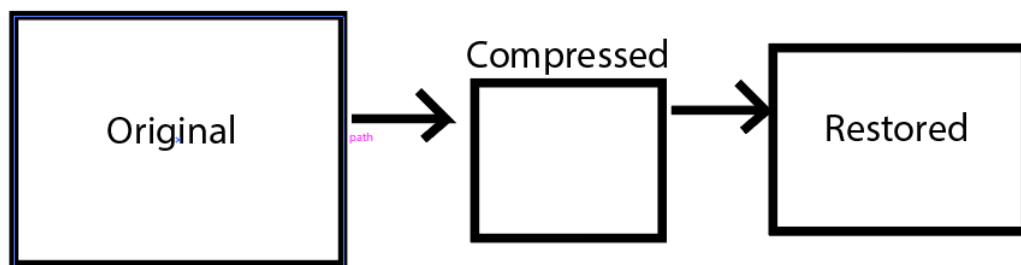
WAV is also another very common audio format. It is a lossless audio format and is mostly used on music streaming platforms like Spotify.

Task 3:

Compression in images is important due to limited space on servers. If images could not be compressed, social media sites like Facebook and Instagram would have a much harder time displaying everything, due to the huge amount of space being taken up by each image. Although the most found image files use a lossy compression format, the change is not very noticeable, as it gets rid of pixels which are not important, or not noticeable. This is only noticeable once the image is uncompressed. The image will lose quality and pixels once it is compressed, which will show when uncompressed.

Audio Compression:

Lossy Compression



Lossless Compression

