**Spike:** 08

**Title:** Game Engines – Download and Build

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**Goals / deliverables:**

* Choose either Unreal Engine or Godot.
* Download the source for the engine
* Build the engine from source.

**Technologies, Tools, and Resources used:**

* Godot source code
* Visual Studio 2022 (for the C++ compiler)
* Python 3.6+ (mine is 3.12.2
* SCons 3.1.2+
* Github
* Word
* <https://docs.godotengine.org/en/latest/contributing/development/compiling/>

**Tasks undertaken:**

* Picked Godot
* Downloaded the zip of the source code from github and unzipped

**What we found out:**

I picked Godot considering some previous experience and I wrote the spike03 second report on it

I was very surprised at how small the zip file and source code were in terms of size, the zip file was 52MB and the unzipped was 210MB before I did anything.

I was entirely following the instructions on the Godot docs website, as they have extensive documentation for doing this.

As my python version is higher than what Godot says is base, I need to use py instead of python for the commands. (I had forgotten this as I mostly used python through visual studio code which handles the file running).

First I needed to install scons.

I did this via python which I had installed from another subject.

Command:

py -m pip install scons

I then had to locate the scons exe in my python install, it was in the scripts folder and I added the scripts folder to my PATH environment variable.

Both installed:

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I cd’d to the Godot source code.

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I then used command:

scons platform=windows

Which began the build.

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Build complete after 14 mins:

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Editor running and location:

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(this is in a sperate folder to the github)

This was far easier and simpler than I thought, I was expecting this to take hours with countless little things needing changed and adjusted for every single machine, this was simple and easy, took less than an hour to both install and build everything while also writing this report.