### Additional Research:

My research into my project idea posted for week 1 was centred around the Unreal Engine and how to integrate AR Core features in an application. I found a QuickStart guide to ARCore at <https://developers.google.com/ar/develop/unreal/quickstart> and followed the guide lines provided by Goolge and the team at Unreal.

My finding where that it was simple to set up the Plugin inside the unreal environment and load a template to play around with and deploy to my testing device. The setup for mobile inside Unreal was a straightforward setup and deployment to mobile was easy and quick.

There have been huge improvements in deployment times in the last two releases of the unreal engine. Packaging and deployment have been a huge focus for Epic following the success of Fortnite on mobile and they have started integrating the technology used to optimize and deploy for mobile into the engine and huge feature updates and improvements on mobile is showing.

I choose to run the application on Vulkan due to the strides made in frame rates and rendering by the open source 3D graphics and computing API. I tried to run my AR core with Vulkan and hit my first barrier in my application design. Vulkan does not support AR rendering as of yet.

I’m am going to use the ASTC 3.1 format to compress my content as it does the highest quality compression and retains a lot of the quality while doing so. I refreshed my memory on the basics of unreal mobile development and different compression strategies for my files by viewing a live stream that Unreal hosts: ref <https://www.youtube.com/watch?v=cRhjTD7FIuI>.

I really appreciated how this week’s exercise has made me think a bit outside of what I usually do. It was challenging and getting the blog up and running on github pages was also a great experience in setting up and I see the value of git hub beyond just hosting code repositories, but seeing the potential of hosting a blog or examples of work done on a domain of your choice.

I found out that Mobile has a limit of 75 on Unreal Engine 4 deployment as confirmed in the forums located at: <https://answers.unrealengine.com/questions/482412/want-to-increase-bone-limit-on-mobile-more-than-75.html> . It can be increased apparently, but then older devices might not recognize the structure and fail to display the character at all.