Artifact one is a 3D model of a rifle with three different variations, two are low poly models with stylized and photorealistic textures and one is a photorealistic high poly model. It was originally created as an assignment in GRA 202 in late 2017. The assignment was to create a 3D model which could be utilized as a game prop.

This item was selected to be a part of the ePortfolio because it is the only artifact available which directly showcases my ability for creating 3D game assets from scratch. Most artifacts available for the ePortfolio were made exclusively with assets available in the Unreal Engine. The only exception is the GAM 303 artifact which includes a couple simple models; however, this artifact better showcases an aptitude for asset creation because it is far more complex and detailed.

One of the main lessons I learned as I was initially creating this artifact is that the process of making a game asset is more so tedious than it is complex. All it takes to make a decent model is some good reference images and plenty of time. It is also important to understand the tools available, which is a lesson learned during the process of polishing this artifact. Implementing the planned refinements took significantly less time than anticipated. The plan was to spend the better part of a week meticulously working on the geometry to remove overlapping segments, which in turn would have required the UV unwraps to be redone and new maps painted for the model. However, there is a tool built into 3DS max which solve the exact issue the planned refinements sought to resolve with just a few button presses, without ruining the existing UV unwraps or maps. Thanks to this, there were no significant challenges faced during the refinement process.