

# Comp 350 Proposal

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February 2018

## 1 Details of my optimisation project

My current 340 group recently decided to scrap the old game Red. Within a couple of weeks, we created a basic couch game that has a lot of potential to it. Although a great amount of work has been produced and has caught us up, it has led to sloppiness in the quality of work. Meaning things have just been quickly put together so that it's viable for the game, as of now it works but later on in the games creation problems will occur. My aim is to work through the majority of the blueprints and optimize them. As the game takes advantage of multiple different blueprints created by half our team, there will be a lot of mistakes and poor programming practices in effect.

## 2 What Engine/Language I will be using

We are currently building our game in Unreal Engine 4.17.2 and using the C++ Language.

## 3 Tools I will use

Because of the type of optimization I will be doing there aren't many tools that will significantly help me. The main tools I will be using to assist me are the extensive online tutorials/documentation on Unreal Engine Optimization and programming practices. While also utilizing the Unreal Engine profiling tool which will help me monitor any changes I make.

### 3.1 Tools for optimizing the whole game

If the optimization I have proposed does not significantly increase the overall efficiency of the project I will be following the below tutorial. This tutorial will use tools such as UE4 CPU Profiler, UE4 GPU Visualizer, and the Intel® Graphics Performance Analyzers (Intel® GPA).

- <https://software.intel.com/en-us/articles/unreal-engine-4-optimization-tutorial-part-1>