Tech Feasibility Report

Introduction

In this section we present the game engine we chose to develop *Captivity*. We will justify our choice and discuss the possible issues we foresee in the development of the game.

The game engine

After *weeks* of indecision, we chose to work with Unity, an idea that came from a group member, who had already worked with it in the previous semester.
These are some of the aspects that lead to the final decision:

- The Unity asset store (https://assetstore.unity.com) provides a lot of free materials and there is a great deal of online support in forums;
- The camera perspective can be easily changed, so we can experiment with different perspectives;
- Since *Captivity* is a light game, we don't need a powerful game engine (like Unreal Engine);
- We expect it will be easy for the remaining group members to learn how to use the engine, given the previous experience and the free tutorials that can be found online.
- If for some reason we need something that doesn't exist as we want it, Unity allows us to build our own tools.

There is also a Unity plugin called Bolt, that has visual, node-based graphs that we can use to design final logic or to quickly create prototypes. It also features an API that can be used for more advanced tasks, or to create custom nodes that can be used by others.

Conclusion

We think Unity will be a good engine for us to develop *Captivity*, mostly because it's suitable for beginners, and due to the wide availability of free resources.
We predict no major issues in the development of the game and are confident that we will be able to create the vertical slices within the semester.