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Weber Institute of Applied Sciences & Technology  
302 W Weber Ave  
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Dear Ms. Ceja & Ms. Gifford

In the following letter, I am writing to request your approval for the current idea we have for our senior project, which is to create a 2D RPG type game called “Cappy in Space REMASTERED (NOW IN 2D)”. In addition to the approval of the senior project idea, I would also like to request the approval of my research topic on 2D-based games and what is going on behind the scenes. I have always been interested in all types of games, but 2D ones pique my interest the most. I would love to see what I will learn during this project.

For the physical portion of this project, it will be split into two parts. Part one, the website which will advertise the game, is going to be worked on by my partner Jeilene Abrica. Part two will be the game itself, which will be my responsibility. I will be using the program called Unity to create this project. The game I will be creating will be from the point of view of a capybara, have multiple different animals as enemies and make use of an 8-bit type of background music. I have never made 2D sprites or animated them nor have I synthesized music before, so this will present a challenge and an opportunity to learn. The game will take place in a space setting. The player will start on an earth-type planet as a tutorial before being able to move on to the rest of the planets in the Star system. World building in 2D is something I have always wanted to do, learning how to make different types of environments as the player moves from planet to planet. However, I do see some upcoming problems that I know I will face. For example, where do I make the sprites? Where do I go to make 8-bit music? Will 8-bit even be a good fit? How do I get started with world building in 2D on Unity? The greatest challenge, in my opinion, that I will face would be the design portion of the game, as I am not the best artist nor do I have good artistic knowledge when it comes to making sprites and worlds look aesthetically pleasing. This entire part of the project would not cost me anything unless I decide to publish the game on Unity. Publishing has a one-time fee of \$100. If I get my stuff together, I can estimate this being done in 4–5 months.

As my project involves the use of the 2D structure, for my research paper I would like to conduct research on popular 2D games and how they are developed. There is so much work put behind the scenes of 2D games that the average person cannot see or fully appreciate. What takes more time, coding or animation? How tedious is it to get animations of the sprites to align with the

input of the player? Are 2D-based games easier or harder to develop than 3D-based games? Does the average player like 2D or 3D games more? Which has the highest rate of player retention? How do their earnings compare? I plan on getting my information through developer logs and getting in touch with some developers who are very active with their community. I want to reach out and hopefully have some interviews with those who are willing to spare their time. I also want to see how their community feels about this, so I will also be engaging with them as well.

We all know what plagiarism is, the act of taking someone else's work and passing it off as your own. In my opinion, this is a very unbeneficial thing to do as you are robbing yourself of the experience of getting to learn new things or to challenge yourself. I am a very curious person. If I get the chance to learn something new, I won't hesitate to do so. I want to experience something new and plagiarizing will get in the way of that.