**Page 1**

Welcome to my CSC3031 Video & Oral Presentation

**Page 2**

I will begin by Introducing my Dissertation Titled:

Before anything else, I’ve included a figure to give you an idea of the global player base and just how many people play video games in the world.

**Page 3**

Moving on, I would like to give an overview of the Gaming Industry in general.

I’ll start with the Size of the Gaming Industry.

Gaming is the most lucrative entertainment industry by far. In other words, it’s the biggest entertainment industry by revenue.

It’s bigger than the movie and music industry combined!

Now, how about the Gaming Population?

Right now, there are over 2 billion gamers across the world. It’s 26% of the world’s population. In simpler terms, there’s at least 1 gamer in every 4 people.

Last year at the end of 2021, there’s estimated to be 2.81 billion players. At the end of this year 2022, it’s forecasted that player count would reach 2.95 billion and eventually reach over 3 billion players by the end of 2023 with a 5.6% compound annual growth rate in player count.

In other words, it’s expected that the number of gamers will continue to increase steadily in the foreseeable future.

**Page 4**

After giving the Overview of the gaming industry in general. It’s important to also consider a considerable portion of its population. I’m talking about gamers facing accessibility issues.

According to the World Report on Disability by the World Health Organisation, over a billion people experience some form of disability. This is roughly 15% of the global population.

Based on survey by PopCap Games Research, this 15% rises to 20% among casual gamers who identify themselves as having some form of disability.

Looking at the Respondent’s Disability Profile below shows that over 50% consider themselves to be moderately disabled while subsequently around 20% identify as either Midly or severely disabled.

Curiously, as the statistics from the aforementioned survey state, disabled gamers tend to spend more time gamer per week than casual gamers overall.

With respect to the graph on the right, we can see that 60% of disabled gamers spend at least 5 hours of gaming a week compared to 52% of casual gamers overall. On the far side to the right, 23% of disabled gamers play at a minimum of 16 hours a week compared to 13% of casual gamers.

This data shows the gaming habits of disabled gamers and it tells us that they have considerable more video game engagement than most people.

Therefore it’s important to consider this population of the gaming demographic

**Page 5**

Moving on, it’s important to consider why disabled players continue to play video games despite the difficulties they face.

Referring back to the PopCap Games Research, 94% if the disabled players continue to play.

So why exactly?

The survey has mentioned varied responses but the most popular ones include.

Disabled gamers believe that playing video games provides various benefits.

Interestingly, most of them at 81% play games for stress relief while 66% use it as distraction from their disabilities. This leads us to believe that they use gaming not as an escape from reality, but more as a refuge to boost once emotional health as evidence by most disabled gamers gravitating towards video games for stress relief and to lift their moods.

**Page 6**

After giving an overview of the Gaming Industry and The Gaming Population, I will now discuss the Motivation and Rationale behind my Dissertation Project.

So why put emphasis on Accessibility in Games?

Important that disabled gamers are not overlooked because they take a sizeable portion of the entire gaming demographic at about 20%. It translates to roughly 1 in 5 gamers having some sort if disability. On top of that, disabled gamers have more engagement to video games compared to most gamers since they tend to play more hours than the average gamer.

Allowing disabled gamers to play and enjoy the games the way they are meant to be experienced.

**Page 7**

Next I will talk about my Aims and Objectives.

The Aim is to:

In order to achieve this aim, I have laid out a few objectives.

The first one is to Identify a set of common accessibility issues and explore audio-visual techniques used to assist players facing such accessibility issues.

Then I will develop separate prototypes focused on each accessibility issue. For example, I will develop a prototype geared towards people with Visual Impairment by incorporating symbols/patterns that colourblind people can associate with certain colours.

After this, I will integrate all the accessibility techniques from the prototypes into one singular game loop.

Finally, I will evaluate the final game according to how well it satisfied established Video Game Accessibility Guidelines. I will also analyse it’s scalability by examining its performance impact on the game whenever the accessibility features are enabled.

**Page 8**

So how will I propose to tackle this project?

I will start with Research. I will begin by researching the most common accessibility issues faced by users and then identify game development techniques that are used to aid with certain disabilities.

Make a 3D game using the Unity Game Engine and follow the Agile Development methodology while adapt a feature-driven development approach where development will focus on each separate impairment or barrier to accessibility.

In other words, development will have deliverables based on each accessibility issue like for example Motor Impairment where I produce a product/implement a technique geared towards players who have trouble using their hands and my solution will be to allow for voice commands.

**Page 9**

I have identified risks that could arise when undergoing project development.

The first is hardware/device damage. Currently, I plan to develop the Unity Game using my personal laptop. If, for any reason, device gets damaged, then I will use the University Clusters as an alternative development device.

Another risk is storage being compromised. I plan to use cloud storage as backup like Microsoft OneDrive or Google Drive. This will be useful in the event that my local storage gets corrupted.

Finally, a more important risk is falling behind schedule/timeline.

If this happens, I will use the Easter Break as a buffer period. While I intend to have an academic break this time, I will do what to be done in order to catch up on work that I’m falling behind on.

**Page 10**

Finally, I’m going to discuss my Current Progress and Work plan.

On the first week of CSC3031, I conducted my initial research on my topic of interest which is Accessibility in Games.

The next 2 weeks after this, I’ve created prototypes to show to my supervisor for approval.

On weeks 4 & 5, I intend to shift my focus to the Video & Oral Presentation and the Ethics Form & Proposal respectively.

At the start of CSC3032 at week 6, I will begin the development of my main software artefact and hopefully finish by week 8.

Easter break will be on weeks 9-12, while I intend to rest during this period, I will do some occasional Dissertation Writing. And if I’m falling behind, I will use this time to catch up on software development work as needed.

Finally on the final 3 weeks of CSC3032, I aim to polish my game and finalise my Dissertation.

Page 11

This is the end of my Oral & Video Presentation. These are the references for the statistics I’ve mentioned above as well as the PopCap Games Research Survey.

If you have some questions, feedback, or would like to get in touch. You can email me @

Thank you for paying attention to this presentation, and do enjoy the rest of your day.