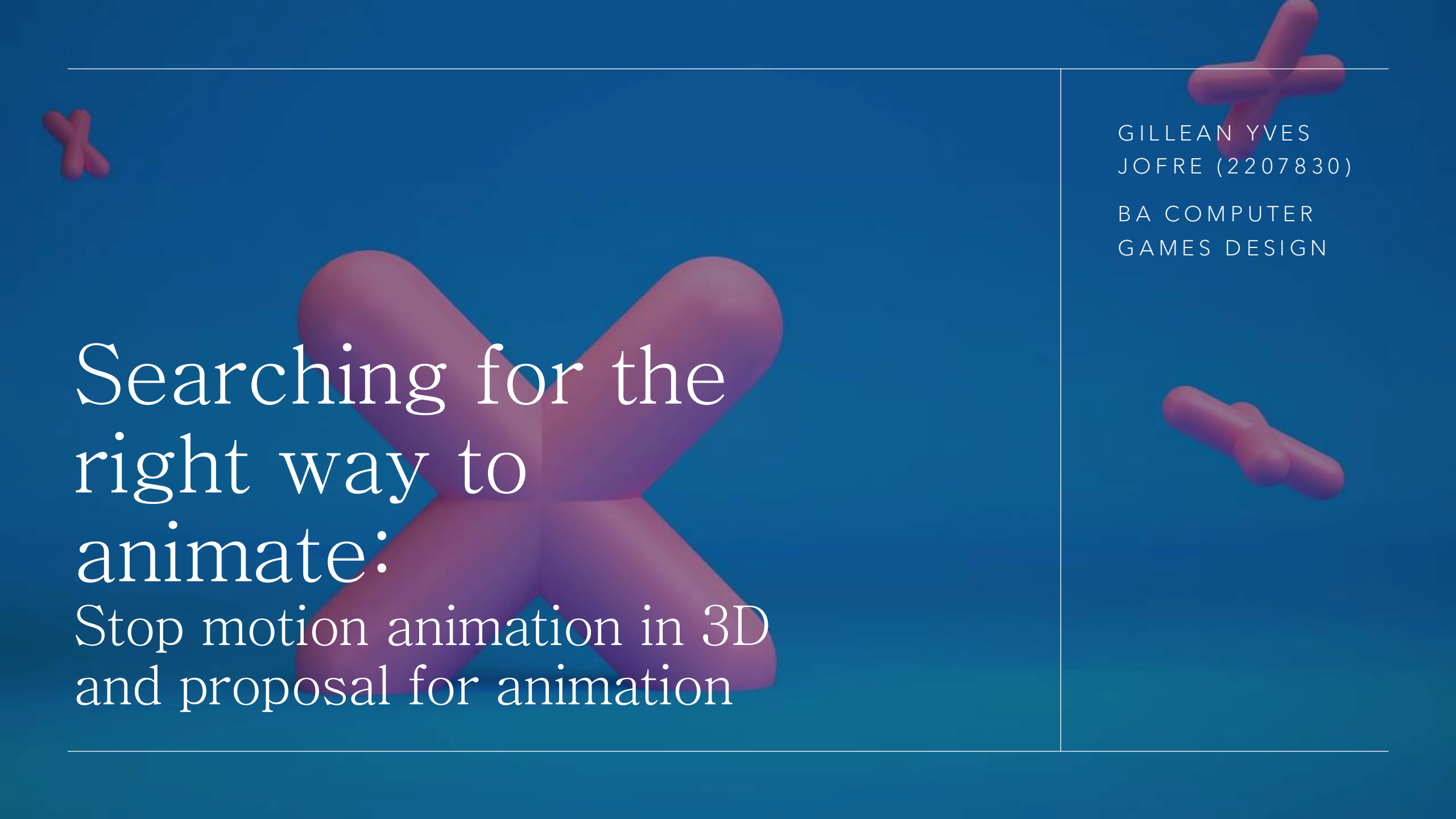




Searching for the right way to animate:

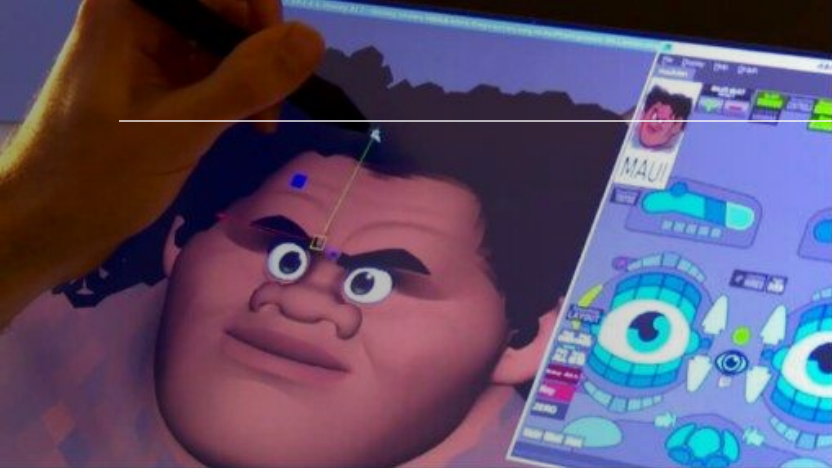
Stop motion animation in 3D
and proposal for animation

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1. Different animation styles: Physical and Digital
 2. Analysing stop motion animation
 3. Stop motion animation created digitally in 3D
 4. Animation proposal
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Different
animation styles

Different animation styles: Physical and Digital

Animation can be created using different mediums, with some of the most popular ones being[2]:

- 3D Animation using computer generated graphics
 - 2D Animation using either digital drawing or physical drawings
 - Stop motion done either physically or digitally
 - Motion capture
-



Stop motion animation: An analysis

Appeal of stop motion animation

- The appeal of stop motion can be broken down into a few parts:
 - Its unique looks compared to traditional means of animation entices people to watch it; the use of real props and physical materials contrast to the more common media of animation, Computer Generated Graphics (CGI)[4].
 - The slightly 'jittery' aspect of the motion in stop motion give of an almost 'real-but-not-real' effect which can be both unnerving and enticing for audiences to watch[5].
 - Stop motion plays on the feelings of nostalgia, with it being popularised in the early days of animation as a medium, as well as its use of 'puppets' to illustrate characters[6].
-

Analysis of Stop motion animation

- Stop motion animation revolves around the idea of capturing a performance frame by frame and later compiling it into a video format, similiar to traditional animation techniques using a sequence of drawings that represent a sequence of frames.



Example of 3D animation:
The character is manipulated
through out the frames to
create a fluid motion.



Example of Stop motion animation:
A physical prop is manipulated in between
frames to create motion.



Example of 2D animation:
An artist creates a sequences of
drawings that represent the
frames of a character's
performance.

Different types of stopmotion

- Stop motion has been used together with several different types of physical props, ranging from clay to paper and pretty much anything in between.



The Humpty Dumpty Circus (1898) is one of the earliest rumoured examples of Object-Motion. [10][11]

This is a technique that involves the use of inanimate object and moving them slightly frame by frame to create motion.[11]



Wallace and Gromit: The curse of the Were-Rabbit is an example of a popular series of Claymation. [12]

This technique revolves around making clay figures for characters and animating them in a stop motion style.[13]



Human Skateboard by PES is a YouTube video showcasing stop motion in the style of Pixilation. [14]

This involves using live actors holding poses to create frames and later compiling them into a stop motion animation to give that effect.[14]



South Park (1992 to early 2000s) was created using a process of stop motion known as Cut-Out animation. [16] [17]

This uses cut outs of papers to create characters and scenes using stop motion animation.[18]

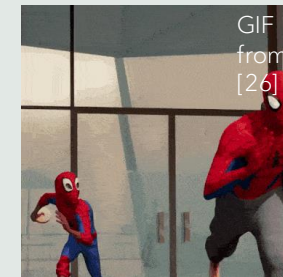
Stop motion in 3D

- An increasingly popular form of stop motion animation is the create a 'stop motion' effect in 3D using a few techniques to create the illusion.
- Recent animations examples are; *Spiderman:Into the spiderverse* [19] and *The Lego Movie*[20].



The Lego Movie pays homage to older Lego-based stop motion animation films by digitally recreating the effect of those older films.

By doing the animation digitally it allows for a wider variety of performance to be created while still be accurate with its use of Lego pieces (The way pieces interact and how a character moves) as well the way it follows the timing of classic Lego animations. [23][24]



Spiderman : Into the Spiderverse uses animation techniques that are inline with stop motion, using different framerates and poses to create the effect. [27][28]

Stop motion in 3D: The process

- Stop motion styled animation can be done in 3D using a couple techniques[29][30]:
 - Manipulating the framerate of an animation to be lower than the standard 24 Frames-per-second. 10-12 Frames-per-Second is the recommended framerate for stop motion.
 - Extended the length of certain frames (hang the frames) to exaggerate movement and add character to the performance.
 - Create digital props that mimic the look of physical assets and manipulate the lighting to create a scene that looks hand animated.
-



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Personal
Animation
Proposal

Animation Proposal

- For my animation project, I am creating a 'teaser trailer' for my final major project. A quick summary of my proposed animation is:
 - Animation will be created in 12 frames-per-second (To recreate a stop motion feel to the animation)
 - The props will be created in a low-poly style with hand-draw textures to blend the look of physical materials and old retro video game characters.
 - It will be a horror animation based around the story of the game for my final major project being that technology is slowly taking over humanity using Virtual Reality Headsets.
-

Animation Inspiration

- My animation took inspiration from both video games, movies and tv series for the design of characters, environments and the performance that will be animated.

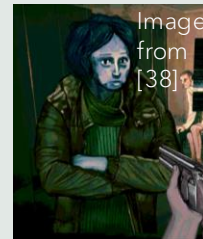
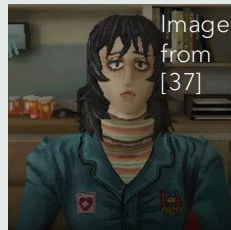
Environment



The inspiration for the environment and overall setting of the animation would be of a stereotypical office building with muted colours and a 'subliminal feel'.

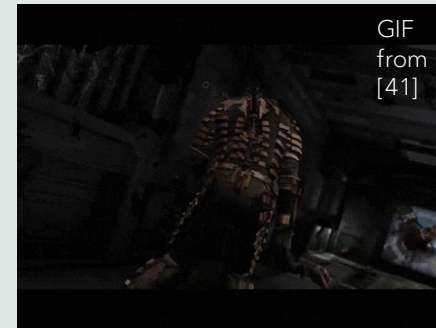
Such environments can be seen in the show 'Severance'[34] and the video games 'Stanley Parable' [35] and 'Superliminal'[36].

Character design



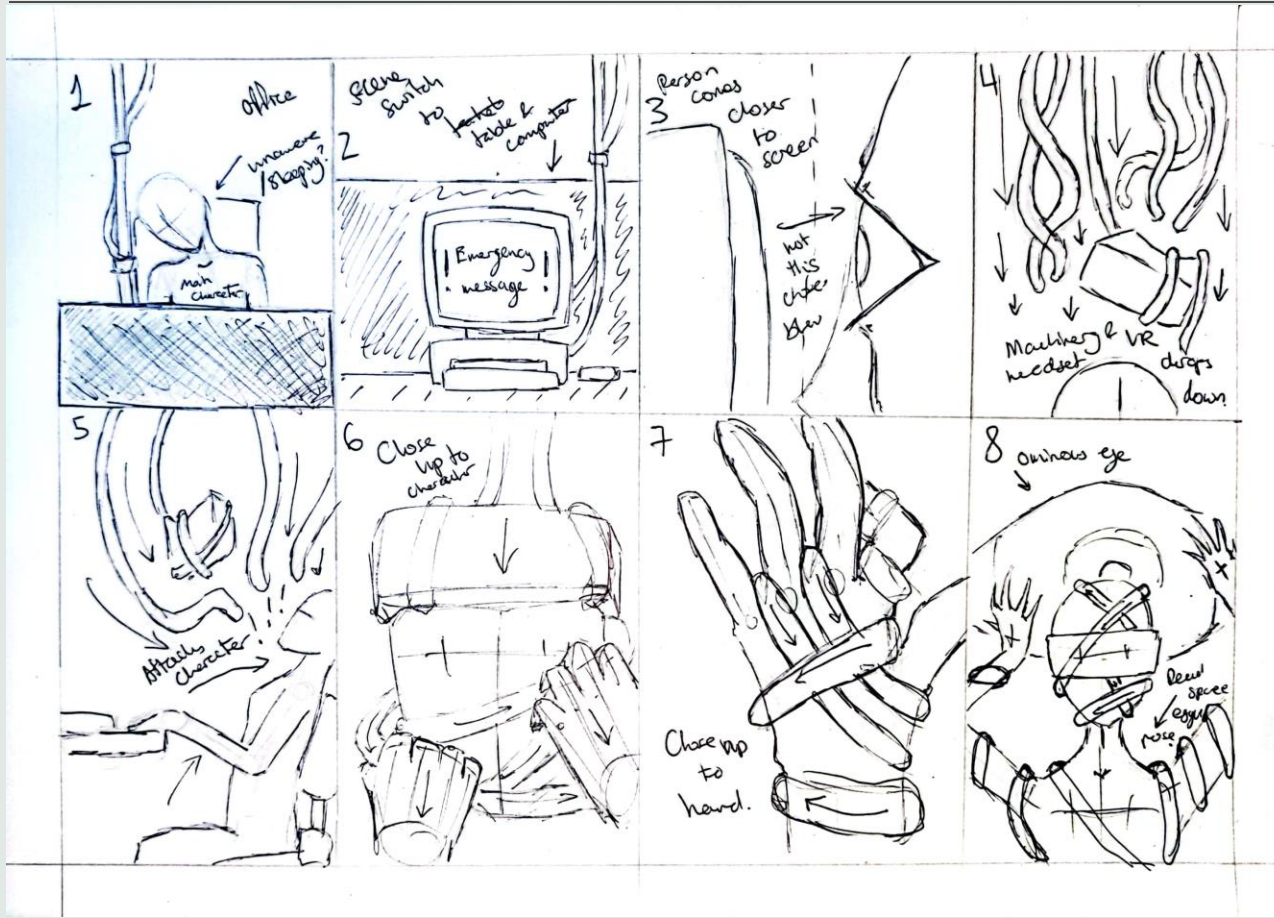
The main character in the performance is inspired by 'pixel' styled art and low-poly models such as seen in the game 'Mouth washing Simulator' [39] and 'No, I am not a human'[40].

Performance



The main performance is inspired by scenes from the game series 'Dead Space'[43]. With the scenes emphasis on forced motion and rigid 'zombie' like movements evoking a 'body horror'-esque performance.

Animation Storyboard and character design



Thank you for your attention!
Any questions?

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