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Concept Proposal

Virtual Space

Assignment 2

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BA Digital Art

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Virtual Space Concept Proposal

MY IDEA

I will create a virtual space artefact for fairy tale storytelling. It will also provide the text of the story. This text visual will encourage reading and strengthen literacy skills.

WHY?

Children have always played make believe and there is much scope to place these stories in a virtual world. These stories have been recounted for generations and to keep them around for future generations it is necessary to modernize the way they are told for the young *digital natives* of today. There are already many e-books and apps on tablets but they do not immerse the child into the story as virtual reality allows. The text visual will consequently encourage reading and strengthen literacy skills.

DIGITAL STORYTELLING ALREADY

Augmented reality is also used for storytelling. Characters and images pop up with the use of a smartphone or tablet. These create a unique reading experience for the child where they can visualize the story as well as rotate and zoom on to the images. Though stories told with augmented reality are

visually appealing they do not immerse you in the environment and let you experience the fairy tale as if you are physically there (Augmented reality trends, 2015). Augmented reality takes the technology to the user but virtual reality takes the user into its technology.

WHICH FAIRYTALE?

There are many fairy tales to choose from but I have opted for Hansel and Gretel because I feel the house and the forest can be visually awe inspiring in a virtual environment. This will be a sample scenario that will envisage the final product.

The style of the images will be similar to the Oculus rift cartoon world demo (Youtube, 2013) and fairy forest (Youtube, 2014). I have also taken inspiration from Colosse, a real time story telling experience which has a stylized visual language which children would be able to engage with (Share, 2015).


Cartoon World Demo **Fairy Forest** **Colosse**

ARTEFACT SCENARIO

I want children to have the freedom to explore the environment. It will be an immersive and realistic experience to make the simulated world as 'real' as the real world because today's generation are too intelligent to be fooled into believing anything less. For example as the child follows Hansel and Gretel into the kitchen the fire will flare up as the witch pushes them past it, the lock on the cage will rattle and the sound of splashing water will be heard in the well.
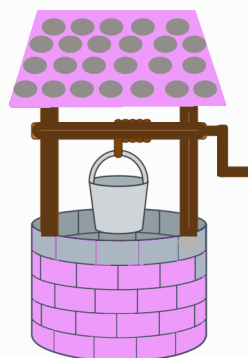
For my project to be successful it is important that the visuals are artistically inspiring and the scenario interesting enough to keep the child's attention span. I will be creating the story with 2D images, which will be easy to navigate through. These images will be flat planes and placed in the environment to create the scene. As the child navigates the environment there will be various visuals to keep them interested eg. animals and fruit and vegetable characters. The text will be kept to a minimum and fixed in the environment irrespective of head movement, so if you move around it's always in the centre of your vision.

USERS

My simulation is targeted at 4-11 year olds. Bettelheim, a child physcologist directly states that 'the age when fairy tales begin to exercise their beneficial impact is around the age of four or five.' He also provides many reasons as to why over eights also benefit from fairy tales (Bettelheim, 1976, p.15). Technology is changing the way children read, write and interact in their daily lives. Tablet use has increased by 5 to 15-year-olds from 14% to 42% and 28% of 3 to 4 year olds use a tablet. 74% of parents strongly agree that it is important for their child to learn to use technology from an early age to get on at school (Ofcom, 2013). There are many devices that can be used to experience virtual reality. Some may not be suitable for younger children, however Google Cardboard or The View Master are perfect for this generation

and a much cheaper option, although the experience can be enjoyed on any of the latest devices.

CHILDREN CONSUMERS ALREADY

VR Kids, a non profit organisation provides a relaxing, therapeutic experience to children of all ages whilst they are hospitalised. The VR experiences take the patient to a fun story environment filled with characters that excite and interact with the user (VR Kids, 2016). These experiences are designed to work with the Oculus rift. My fairy tale VR can also be used in hospitals to keep children entertained and occupied. Many kids are hospitalised for a long time and using VR especially for bed ridden children would take them out of the hospital environment into another world. Fairy tales are comforting and a reminder of home and schools where these are read, told and heard.

TECHNOLOGY

Though the age limit is 13, virtual reality developers hope further development will lower the age limit so younger children can experience this space (Vrfocus, 2016). Demo shows have a lower age limit of 7 where children have

tried the rift and have provided positive feedback (Kidscreen, 2014). Children have a right to the use of technology. iRights continuously works towards putting a legal framework in place to enable children and young people to access digital technologies (Tech age Kids, 2015). Google cardboard or the more robust Mattel's Viewmaster can be used as an alternative to any of the latest headsets. Though the quality of these may not provide the same experience they are a much cheaper alternative so for children are a perfect option.
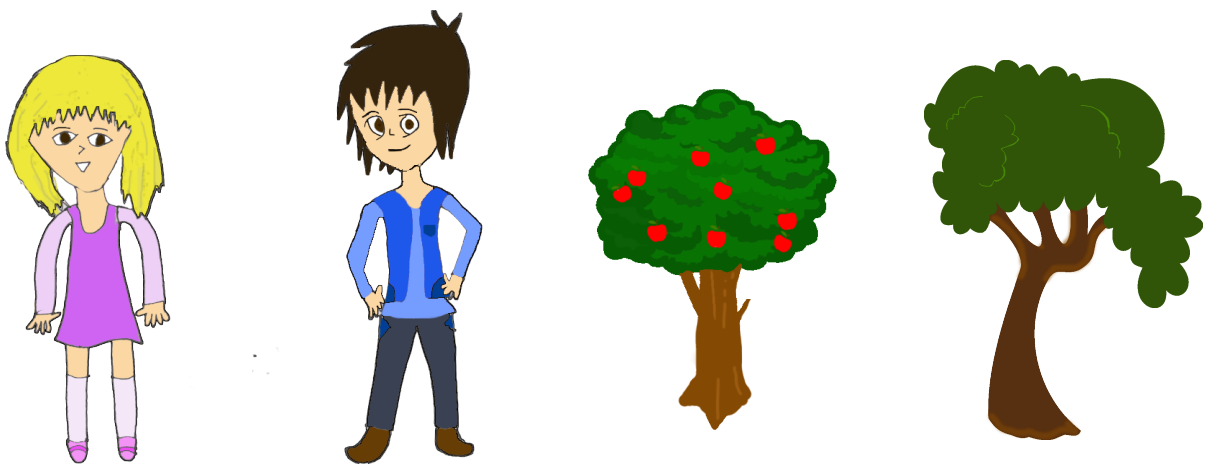
SKETCHED

SAMPLE SCENARIO

I have created various 2D objects in Photoshop and Illustrator.

In essence the story told will keep in line with the fairy tale but due to modern day issues with sugar I will also add fruit trees and vegetables around the environment to reinforce the message of having five portions of these everyday. These fruit and vegetables will have friendly faces and their own characteristics. The finished images will be uploaded in unreal engine to create the VR experience. I will be using soft colours and lighting, which will be easy on the eye.

TECHNICALITIES

Tele presence is important to keep the child's attention and interest. However haptic feedback will not be possible. Partly because of the lack of technology advancement and also because the users will be quite young and I want them to experience the virtual environment with ease and without any added complications. The user will have limited control in the environment. The narrative will progress using gaze driven mechanics. The visuals will unfold as the child directs his sight to different parts of the field of view. Different features in the scene including sound, images and animation will move the narrative forward according to the actual fairy tale. The text of the story will also follow through and therefore ensuring the story is read as intended in the book. The visual and audio sensory stimulation will be consistent throughout. I want to have both video and audible access to provide full immersion and interaction. Sound will be soft enough so as not to interfere with the exploration of the space or reading of the text. It is important to have sound effects so the user will not feel isolated in the virtual world. Audio through the phones speakers will provide the child with sound but external headphones will provide a more immersive experience. There are many children friendly sets at reasonable prices to choose from. The virtual space will be controlled by the user's head movement. The latency of the latest head mounted displays are at their lowest levels and this will also help with the immersive experience. Strapless cardboard VR headsets have the advantage of tiring your arms and therefore having to put it down and relieving your vision for a few seconds. Google is also working with leading smartphone manufacturers to develop their phones for highend virtual reality experiences and therefore

eliminating many of the issues which occur using VR with the cardboard headset (MIT Technology Review, 2015). Google cardboard is focused on providing children special edition headsets, Star Wars version (Wareable, 2015). Storytelling in VR requires the user to be guided towards the field of view and consequently a time duration can be placed on the story. The length of my project will be about 20 minutes. This will allow for interest to be maintained as the story and environment are unfolded and also ensure that the headsets are used for a minimum time. Professor Peter Howarth, an optometrist and expert on stereoscopic displays believes that there is no significant risk to children's sight. He feels that companies making these headsets are only covering themselves with the age limit of 13 (VentureBeat 2016).

THE FUTURE

Fairy tales are modernized for today's audience in cinematic form and are extremely popular. Frozen released in 2013 is the highest grossing animated film inspired by Hans Christians The Snow Queen. If this project idea becomes feasible I would like to explore other fictions for older children eg Harry Potter. The synopsis of the books can be created in VR to help with the choice of book to borrow or buy from libraries or shops.
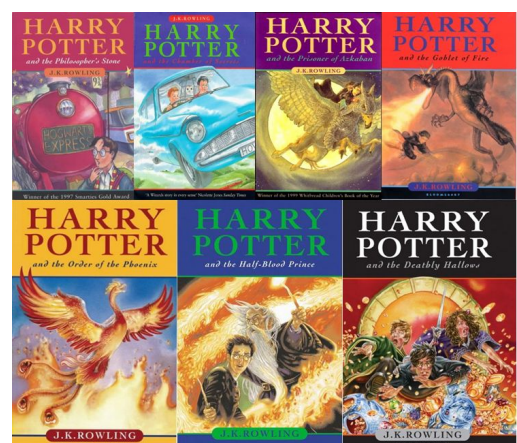
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