Deliverable C

The Ottawa Hospital Virtual Reality Treatment Simulation

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10/03/2019

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Benchmarking

Functional Requirements				
Design Specifications	Relation (=, < or >)	Value	Units	Verification Method
Takes input from two 180 degree video cameras	=	Yes	N/A	Test
Has a user interface with selectable options	>	2	Possible user modes	Analysis
Has pause, play, skip and rewind buttons	=	Yes	N/A	Analysis
Can be modified by hospital	=	Yes	N/A	Tes
Compatible with Oculus Rift	=	Yes	N/A	Test
Compatible with Oculus Quest	=	Yes	N/A	Test

Company	VR Vision	Stanford Children's Hospital	VR Health	BC Children's Hospital
Cost	Not specified	Not specified	Not specified	Not specified
Works with 180 degree video	No	Not applicable		Not applicable
Program can be modified by hospital		Yes		Yes

Hard drive\ cloud memory allowance	Not specified	Not specified	Not specified	Not specified
Bilingual				
Compatible with Oculus Rift	Yes, as well as HTC Vive Focus Plus and Pico Neo	Yes, the project was developed to be used on the Oculus	Yes, the company is in partnership with Oculus	Yes
Compatible with Oculus Quest	Yes, as well as HTC Vive Pro Eye and Pimax 5K Plus	Yes, the project was developed to be used on the Oculus	Yes, the company is in partnership with Oculus	Yes
End to end/selectable options	Yes	Yes	Yes	Not specified
180 Degree Video Display	Yes - as well as high quality video for anti nausea	Yes, there was a complete recreation of the operational experience.	Not specified	360 degree video
Interface to Select Different VR Scenarios	Not specified	Not specified	Not specified	No

Constraints

The project is limited to a budget of $100 or less. Individuals of age nine and older should be able to use the program, so they may experience future medical treatment with more ease. The design must be able to accommodate video footage taken by two 180-degree videos. The final constraint of this design project would be the size of the hard drive, this would affect the size of the program since there would need to be large allocated memory just for the input videos.

Design Specifications	Relation (=, < or >)	Value	Units	Verification Method
Age group 8/9/10 +	>	N/A	N/A	Test
$100 budget	>	100	$	Budgeting
Takes input from two 180 degree video cameras	=	Yes	N/A	Test
Hard drive\ cloud memory allowance	>	1	TB	Test

Bibliography

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