## **User Testing Questionnaire**

COMP3180 – Virtual Reality and Advanced Game Development

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## Participant Information and Consent Form

Environmental Destruction In Unreal Engine 5

You are invited to participate as a playtester for a project involving Environmental Destruction using UE5 chaos destruction. The purpose of this study is to investigate the quality of environmental destruction simulations in unreal engine 5.

This study is being conducted by Alex Milton an undergraduate student at Macquarie University currently completing a Bachelor of Games Design and Development. This study is being conducted as part of a requirement for the unit COMP3180 "Virtual Reality and Advanced Game Development".

If you decide to participate, you will be invited to complete a playthrough of the application after which you will be asked to complete a (15 min) demographic and player experience survey. The entire process is expected to take no longer than 30 minutes.

The information collected through surveys will be recorded via Google Forms. All data collected will be, only accessible by Alex Milton and the COMP3180 supervisors listed above. The data will only be used to evaluate the performance of the environmental destruction system. The data will be de-identified and will not record any sensitive information.

Participation in this study is entirely voluntary: you are not obliged to participate and if you do decide to participate, you are free to withdraw at any time without having to give a reason and without consequence. Should you have any concerns about the conduct of this study, you can contact the COMP3180 supervisors listed above.

## \* Indicates required question

1. By entering my Name below I confirm I have read (or, where appropriate, have had read to me) and
understand the information above. Any questions I have asked have been answered to my satisfaction. I agree
to participate in this research, knowing that I can withdraw from further participation in the research at any time
without consequence. I confirm that I am over 18 years old. I have been given a copy of this form to keep.

2.	How frequently do you play first or third person games that include environment interaction of any kind? *					
	Mark only one oval.					
	Never Played					
	Play occassionaly					
	Play Weekly					
	Play Daily					
3.	Have you played many games with environmental destruction previously? If yes please list those you can remember					
3.						
3.						
3.						
3.						

4.	On a scale of 1-5 please rate the destruction simulation of the medium wooden wall when struck with projectile			
	Mark only one oval.			
	1 2 3 4 5			
	Cart Behaved as expected			
5.	On a scale of 1-5 please rate the destruction simulation of the medium wooden wall when struck with projectile <sup>*</sup>			
	Mark only one oval.			
	1 2 3 4 5			
	Cart Behaved as expected			
6.	On a scale of 1-5 please rate the destruction simulation of the medium wooden wall when struck with projectile 3			
	Mark only one oval.			
	1 2 3 4 5			
	Cart			

7.	On a scale of 1-5 please rate the destruction simulation of the medium wooden wall when struck with projectile
	Mark only one oval.
	1 2 3 4 5
	Cart Behaved as expected
8.	On a scale of 1-5 please rate the destruction simulation of the thick wooden wall when struck with projectile 1 *
	Mark only one oval.
	1 2 3 4 5
	Cart Behaved as expected
9.	On a scale of 1-5 please rate the destruction simulation of the thick wooden wall when struck with projectile 2 *
	Mark only one oval.
	1 2 3 4 5
	Cart Behaved as expected

10.	<ol> <li>On a scale of 1-5 please rate the destruction simulation of the thick wooden wall when struck with projectile 3 *         Mark only one oval.</li> </ol>					
	1 2 3 4 5					
	Cart Behaved as expected					
11.	On a scale of 1-5 please rate the destruction simulation of the thick wooden wall when struck with projectile 4 *					
	Mark only one oval.					
	1 2 3 4 5					
	Cart Behaved as expected					
12.	On a scale of 1-5 please rate the destruction simulation of the thin wooden wall when struck with the projectile 7.					
	Mark only one oval.					
	1 2 3 4 5					
	Cart					

On a scale of 1-5 please rate the destruction simulation of the thin wooden wall when struck with projectile 2
Mark only one oval.
1 2 3 4 5
Cart Behaved as expected
On a scale of 1-5 please rate the destruction simulation of the thin wooden wall when struck with projectile 3
Mark only one oval.
1 2 3 4 5
Cart Behaved as expected
On a scale of 1-5 please rate the destruction simulation of the thin wooden wall when struck with projectile 4
Mark only one oval.
1 2 3 4 5
Cart Behaved as expected

16.	On a scale of 1-5 please rate the destruction simulation of the thin concrete wall when struck with projectile 1 *					
	Mark only one oval.					
	1 2 3 4 5					
	Cart Behaved as expected					
17.	On a scale of 1-5 please rate the destruction simulation of the thin concrete wall when struck with projectile 2 *					
	Mark only one oval.					
	1 2 3 4 5					
	Cart Behaved as expected					
18.	On a scale of 1-5 please rate the destruction simulation of the thin concrete wall when struck with projectile 3 *					
	Mark only one oval.					
	1 2 3 4 5					
	Cart Behaved as expected					

19.	On a scale of 1-5 please rate the destruction simulation of the thin concrete wall when struck with projectile 4 *			
	Mark only one oval.			
	1 2 3 4 5			
	Cart Behaved as expected			
20.	On a scale of 1-5 please rate the destruction simulation of the medium concrete wall when struck with projectile 1	*		
	Mark only one oval.			
	1 2 3 4 5			
	Cart Behaved as expected			
21.	On a scale of 1-5 please rate the destruction simulation of the medium concrete wall when struck with projectile 2	*		
	Mark only one oval.			
	1 2 3 4 5			
	Cart Behaved as expected			

22.	On a scale of 1-5 please rate the destruction simulation of the medium concrete wall when struck with projectile 3				
	Mark only one oval.				
	1 2 3 4 5				
	Cart				
23.	On a scale of 1-5 please rate the destruction simulation of the medium concrete wall when struck with projectile 4				
	Mark only one oval.				
	1 2 3 4 5				
	Cart Behaved as expected				
24.	On a scale of 1-5 please rate the destruction simulation of the thick concrete wall when struck with projectile 1 *				
	Mark only one oval.				
	1 2 3 4 5				
	Cart Behaved as expected				

25.	On a scale of 1-5 please rate the destruction simulation of the thick concrete wall when struck with projectile 2 *				
	Mark only one oval.				
	1 2 3 4 5				
	Cart Behaved as expected				
26.	On a scale of 1-5 please rate the destruction simulation of the thick concrete wall when struck with projectile 3 * Mark only one oval.				
	1 2 3 4 5				
	Cart Behaved as expected				
27.	On a scale of 1-5 please rate the destruction simulation of the thick concrete wall when struck with projectile 4 *				
	Mark only one oval.				
	1 2 3 4 5				
	Cart O Behaved as expected				

28.	On a scale of 1-5 please rate the destruction simulation of the medium brick wall when struck with projectile 1 *				
	Mark only one oval.				
	1 2 3 4 5				
	Cart Behaved as expected				

29. On a scale of 1-5 please rate the destruction simulation of the medium brick wall when struck with projectile 2 \* Mark only one oval.

1	2	3	4	5	
Cart					Behaved as expected

30. On a scale of 1-5 please rate the destruction simulation of the medium brick wall when struck with projectile 3 \*

Mark only one oval.

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Cart Behaved as expected
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31.	On a scale of 1-5 please rate the destruction simulation of the medium brick wall when struck with projectile 4 *					
	Mark only one oval.					
	1 2 3 4 5					
	Cart					
32.	On a scale of 1-5 please rate the destruction simulation of the thick brick wall when struck with projectile 1 * Mark only one oval.					
	1 2 3 4 5  Cart					
33.	On a scale of 1-5 please rate the destruction simulation of the thick brick wall when struck with projectile 2 * Mark only one oval.					
	1 2 3 4 5  Cart					

On a scale of 1-5 please rate the destruction simulation of the thick brick wall when struck with projectile 3 *
Mark only one oval.
1 2 3 4 5
Cart Behaved as expected
On a cools of 1.5 places rate the destruction simulation of the thick brick wall when struck with projectile 4.*
On a scale of 1-5 please rate the destruction simulation of the thick brick wall when struck with projectile 4 * Mark only one oval.
1 2 3 4 5
Cart Behaved as expected
On a scale of 1-5 please rate the destruction simulation of the thin brick wall when struck with projectile 1 *
Mark only one oval.
1 2 3 4 5
Cart Behaved as expected

37.	On a scale of 1-5 please rate the destruction simulation of the thin brick wall when struck with projectile 2 *
	Mark only one oval.
	1 2 3 4 5
	Cart Behaved as expected
38.	On a scale of 1.5 please rate the destruction simulation of the thin brick wall when struck with projectile 2.*
30.	On a scale of 1-5 please rate the destruction simulation of the thin brick wall when struck with projectile 3 *
	Mark only one oval.
	1 2 3 4 5
	Cart Behaved as expected
39.	On a scale of 1-5 please rate the destruction simulation of the thin brick wall when struck with projectile 4 *
	Mark only one oval.
	1 2 3 4 5
	Cart Behaved as expected

40.	Please describe how you felt about the destruction of wooden (brown) surfaces overall. Did it feel realistic or strange? if so how?	*
41.	Please describe how you felt about the destruction of concrete (grey) surfaces overall. Did it feel realistic or strange? if so how?	*

42.	Please describe how you felt about the destruction of brick (orange) surfaces overall. Did it feel realistic or strange? if so how?	
43.	Please describe how you felt about the impact and interactions of projectile 1 (Rock (blue)) *	
44.	Please describe how you felt about the impact and interactions of projectile 2 (Impact Bomb (orange)) *	

Please describe how you felt about the impact and interactions of projectile 3 (Timed explosive (red)) *
Please describe how you felt about the impact and interactions of projectile 4 (Cannon Ball (yellow)) *
Please describe any instances where you encountered performance issues or bugs. *

48.	Please provide any additional comments or feedback you have on this project. *

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