

GNG 1103 F-03  
Group 3.4

# Deliverable C: Design Criteria

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## 1. Introduction:

There currently exists a need for a VR experience that can help promote empathy in its users. From the interpreted client needs our team derived a series of criteria of what must be met for a successful product. Similar products on the market were benchmarked to analyze their strengths and shortfalls when accomplishing their stated goal. This along with user reviews were and criteria were used to create a table of metrics that could be used to further define the requirements of our product.

## 2. Needs to Criteria

Number	Need	Criteria
1	<p>Show the more implicit, subtle aspects of bigotry or discrimination.</p> <ul style="list-style-type: none"> <li>- Small comments that make people feel isolated.</li> <li>- Show how even without racism or bigotry, an overwhelming sense of “otherness” can demoralize a person.</li> <li>- Show how well meaning comments can negatively affect people.</li> <li>- Train people on implicit bias and improve their points of view.</li> </ul>	<ul style="list-style-type: none"> <li>-Simulation must display/express implicit bigotry</li> <li>-Simulation should make users empathize with that experience</li> </ul>
2	<p>Show the more explicit, major aspects of these lived experiences/discrimination</p> <ul style="list-style-type: none"> <li>- Show light on systematic inequality(Ex: Indian Act)</li> <li>- Show the social/legal/cultural hurdles that are faced by minorities</li> <li>- Show the impact of physical disability/minority discrimination</li> <li>- Highlight minority discrimination(racial/sexual/gender/religiou s)</li> </ul>	<ul style="list-style-type: none"> <li>-Simulation must display/express explicit bigotry</li> <li>-Simulation should present information regarding systematic racism.</li> <li>-Simulation should make users empathize with that experience</li> </ul>
3	<p>Create an interactive VR experience</p> <ul style="list-style-type: none"> <li>- Scenario interaction</li> <li>- Actions affect the course of the narrative.</li> </ul>	<p>Number of scenarios</p> <ul style="list-style-type: none"> <li>- Accessable <ul style="list-style-type: none"> <li>- Cost</li> <li>- Simple to play</li> </ul> </li> <li>- Intuitive</li> <li>- Interactive Mechanics</li> <li>- VR compatible</li> </ul>

		- Runs without bugs/issues
4	User Friendly and Intuitive	-mostly free of bugs -save and load functions -clear icons -Comfortable picture quality -Reasonable BGM -Number of buttons presses needed/How many menus
5	Some people may not be suitable for this game (children, heart patients, someone who is sensitive to this topic)	- A Reminder before the game starts - Set an age limit

### 3. Criteria

	Non-Functional Requirements	Relation(=, < or >)	Value	Units	Verification Method
1	Provides an experience that promotes empathy towards others	=	True	N/A	Survey
2	Reliability /Stability	=	True	N/A	Playtest
3	Narrative Storytelling (done through dialogue)	=	True	N/A	playtest
	Functional Requirements				
4	Accessibility	=	True	N/A	playtest
4.1	Degree of game literacy(number of button presses needed to get into the experience)	<	2	Number	Test
4.2	Navigable UI(number of buttons on screen/quality of UI)	<	3	Number	Test
5	Mechanical Storytelling (Storytelling through the gameplay)	=	True	N/A	Playtest
6	Good quality of Information Provided	=	True	N/A	Research

	Constraints				
7	Price	<	20	\$	Cost Analysis
8	Time (time for each story)	<	10	mins	Playtest
9	VR (compatibility on VR systems)	=	True	N/A	Test
10	Age range/target users	>	10	Years	Research

#### 4. Benchmarking

Specification	Dys4ia	That Dragon, Cancer	Papo and Yo
Price	Free	\$9.99	\$14.99
Accessibility	You only need to use the arrow keys to play	Point and click	Mouse and WASD, basic video game literacy
Experience	Understand the frustrations of hormone therapy	Understand the pain and loss of losing a family member to cancer	Experience how childhood imagination was used to escape the reality of a drunken, abusive father.
Mechanics for promoting empathy	Deliberately frustrating puzzles and mechanics to convey the frustrations of hormone therapy	The game cannot be won. to progress you must complete the episodes of the game or find a phone containing a voicemail	The "monster", a character required for completing the puzzles, becomes aggressive when it eats frogs, and can only be calmed down after it eats fruits. Frogs are a stand in for alcohol.
Educate/Inform	No formal information or stats on trans rights or discrimination	No statistics or formal information on child cancer	No statistics or formal information on domestic and alcohol abuse
Narrative	Series of minigame showing small experiences	Series of vignettes/episodes that detail the experience of living with a family member	Series of dream-like levels where the player must use the monster to progress through the story.

		with cancer	
points	13	10	8

Better=3	Midrange=2	Worse=1
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## 5. User Benchmarking

Reviews	Dys4ia	That Dragon,Cancer	Papo and Yo
Positives	-Simple but gets its point across well because of it -free game -easy to control	-high picture quality – perfect BGM – You can feel the heart movement of the protagonist -Simple -using letters to tell players info.	-very detailed setting menu -good BGM You have a partner (a monster) don't feel lonely -multiple tasks/missions
Negatives	-Background music is harsh -Subjective game which the player's life experience greatly change their enjoyment of the game -some bugs	– Not suitable for some special groups -The middle story is a little too sad and will make the player cry, which is a good thing, but some people may have emotional breakdowns	-Not suitable for people unaccustomed to games or with medical conditions (heart diseases, seizures...) -Complicated puzzles take away from the story
Constructive criticism	-create the replay or skip button to prevent players from getting stuck	-Playtest to ensure user can't misinterpret information	-Game optimization, low-level computers also can play it.
Interesting points	-Adds comic relief for the player	-There are enigmatic areas in the game that really empathize the message of the story	-there is a NPC with you. -action/ adventure game. -very good landscape
Review	<a href="#">Dys4ia - Walkthrough, Tips, Review (jayisgames.com)</a>	<a href="#">That Dragon, Cancer Review - The Story of Joel Green - OnlySP (escapistmagazine.com)</a>	<a href="#">Papo &amp; Yo Review - IGN</a>

## 6. Metrics

Metric	Value	Unit	Importance (1-10, 10 being highest importance)
Max time for game loading	1	min	7
Number of buttons to start the story	3	number	4
Average time required for completion of game	15	mins	8
Number of possible menus	3	number	5
Size of game	150	Megabytes	3
Number of settings	7	number	6
Number of background music	3	number	2
Price of game	0	CAD	1

## 7. Conclusion:

In conclusion, we believe these metrics and criteria are sufficient to guide our design going forwards. The process of benchmarking helped to refine our understanding of what is expected of a project in this market. Now, the main design problem is what type of experience we wish to bring with this project. Ideas currently vary from a linear narrative to an open ended interactive story to a create and share your personal experiences project. These ideas will be further refined and pitched to the clients for further feedback and direction.

## 8. Wrike

<https://www.wrike.com/frontend/ganttchart/index.html?snapshotId=QzIkOrowCHoDfyWRhEK4u4Pflcd9GzAK%7CIE2DSNZVHA2DELSTGIYA>

## 9. References

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