

Deliverable E:
Lions and Tigers and Plans, Oh My!

Muriayika Belzor - 300063415

Ryan Blechner - 300091411

Krystian Chochlinski - 300065060

Jared Wagner – 300010832

17 February 2019

GNG 1103E

Emmanuel Bouendeu

Contents

1. Introduction	3
2. “Prototypes”	3
2.1. “Prototype” 1	3
2.2. “Prototype” 2	3
2.3. “Prototype” 3	3
3. Bill of Materials	3
4. Risks & Contingency Plans	4
5. Gantt Chart.....	4

1. Introduction

In our VR application, the patient will be brought on a space journey by an astronaut character who acts as a pilot of the spaceship. During this journey, the patient will be brought through space (seeing planets, asteroids, and other space objects), and to foreign planets (such as the surface of mars). This application will also need music, sound effects, and other visual effects.

Where possible, objects with complex textures will be constructed with shaders (e.g. planets, smoke, fire). Other objects (e.g. terrain, asteroids, pilot body, player body) will be constructed with 3D modelling software.

Audio will be taken from YouTube and other sources, but open source audio will be sought out where possible.

Estimated time for each task

2. “Prototypes”

2.1. “Prototype” 1

In the first stage of design, work will be focused on building a bare-concept of the VR application. Specifically, the first prototype will focus on the space aspects of the game; travelling through space, planets, asteroids, and the space ship.

2.2. “Prototype” 2

In the second stage of design, work will be focused on visiting a planet. Terrain, shifting of skyboxes, and objects in the spaceship (e.g. the astronaut accompanying the player to space).

2.3. “Prototype” 3

In the final work stage of the design, work will be focused on finishing touches of the game; implementing the game on a VR headset, adding music, and polishing the game.

3. Bill of Materials

Bill of Materials				
Item #	Item Description	Quantity	Unit Price (\$)	Amount (\$)
1	4K Space Box	1	8	8
2	Planet Creator	1	15	15
3	Planet Shader and Showading System	1	0	0
4	Space Button Multi-Pack	1	5	5
5	Sun Surface Shader	1	4.99	4.99
Total:				32.99

* All currencies are USD

4. Risks & Contingency Plans

Significant risks associated with this project can be mitigated with contingency plans.

Risk	Avoidance plan	Contingency plan
Technical difficulty.	Members will communicate and make sure that software, file types, etc. are	Spare time will be allocated such that some tasks could be repeated if necessary before deadlines.
Loss of data or files.	Members will use cloud storage services (e.g. Dropbox) to save important documents.	
Tasks are not completed on time.	Tasks will be scheduled in advance, and members will share their progress at weekly team meetings. Tasks will generally be distributed on an interest-based basis.	Tasks could be re-allocated to members who have time to complete these tasks.
Members do not contribute equally		Members will discuss the problem and try to reach a consensus. If this fails, mediation could be sought from the professor.

5. Gantt Chart

The Gantt Chart for Deliverable E has been submitted as a separate PDF from this document.