

**Team Submission:
Team User Testing Report 1
Project MNPUL8R
Team 34**

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Aggregated Test Results:

User Test Findings:

1. Suggestion: Option between Start and Quit
 - a. Minwoo suggested this feature.
 - b. This affects our main menu.
 - c. This changes our game because if implemented, the user can set their preferences for gameplay before starting the game.
2. Suggested Gestures
 - a. We asked the subjects of the tests what gestures they would perform for each action the game requires.
 - b. This affects our considerations when programming using the Leap Motion device.
 - c. This changes our game by defining the gestures. Were we to implement gestures without user testing, the gesture may be unnatural to the user.
3. Subjects unsure of the motive behind changing environment
 - a. Christian mentioned this.
 - b. This affects how the game should be introduced.
 - c. We need to make it more obvious that this game is intended to be a puzzle-based walking simulator, and that environment altering is an element of that.
4. Controller tutorial
 - a. Xavier mentioned that he didn't understand the controller operation.
 - b. This affects the tutorial.
 - c. The controller we are using is atypical for virtual reality, so it would be advisable to add a section to the tutorial for how to use the controls, before instructing different gestures and features.
5. The concept is confusing and may hinder enjoyability
 - a. Natalia stated that she found the concept confusing and didn't know if she would enjoy playing the game.
 - b. We need to develop higher fidelity mockups for user testing to better communicate the concept.
 - c. If testing with our higher fidelity mockups does not go well and users will not find it enjoyable, we may have to rethink several of our features to make them more fun.

Incorporation of Feedback:

User Finding Number 1 Incorporation:

To incorporate this finding, we will test an options feature in the main menu. We will consider adding several options such as volume, brightness and full screen versus windowed mode.

User Finding Number 2 Incorporation:

To incorporate this finding, we will consider the subject's proposed gestures in the design of our final gestures for the in-game actions, input through the Leap Motion Orion.

User Finding Number 3 Incorporation:

To incorporate this finding, we will create an introduction sequence explaining that this game is a walking simulator with optional environment manipulation features and simple puzzles.

User Finding Number 4 Incorporation:

To incorporate this finding, we will implement a controller section in the tutorial level to inform and instruct the user on how to operate the Leap Motion Orion.

User Finding Number 5 Incorporation:

To incorporate this finding, we will develop higher fidelity mockups in order to better communicate our ideas and concept to test subjects.

User Profiles:

Persona 1: Minwoo Park

- Age: 23
- Race: Asian
- Gender: Male
- Profession: Computer Science Student
- Hobbies: Gaming, Photo Manipulation, 3D Art
- Tech Level: Medium - games often and understands basic controls for most gaming software, is intuitive with computer software

Persona 2: Christian Whiteman

- Age: 32
- Race: White
- Gender: Male
- Profession: Restaurant Owner/Manager
- Hobbies: Gaming, Golfing, Watching football, VR Gaming (HTC Vive, High-End PC)
- Tech Level: High - often games with his other tech bros and knows a lot about Virtual Reality Gaming, tech collector/hobbyist, design hobbyist.

Persona 3: Xavier Murphy

- Age: 18
- Race: Black
- Gender: Male
- Profession: High School Student
- Hobbies: Basketball, Netflix Original Movies, playing Call of Duty
- Tech Level: Low - understands basic xbox controller, but past ordinary game controllers has very little intuition when it comes to games

Persona 4: Natalia Petrov

- Age: 29
- Race: White
- Gender: Female
- Profession: Instructor at a Music School
- Hobbies: Watching K-pop videos, Swimming, Eating Ice Cream, Music
- Tech Level: None - She was never into technology. She never played an online games and is afraid that one day technology will destroy our life.

Script

1. Introduction:

- a. Hello, What is your name?
- b. What is your occupation, what do you do?
- c. If you had to guess how many hours a week you spend playing video games?
- d. If so, what kind of games? What kind are your favorite?
- e. Do you have any previous experience using virtual reality systems?
- f. If so, what VR game/experience did you have?
- g. Excellent, now that we have some background info out of the way, let's take a look at the game!
- h. We're going to show you some images and cover some of the game's concepts.
- i. Once we are done with a concept, we will ask you for some input.
- j. Everything goes here, we're still early in development and we're looking for anything you could possibly have to say.
- k. Please be open and don't worry about hurting our feelings, we want to improve the game and realize there are still lots of tweaks to be made.
- l. Okay, ready? Let's begin!

2. Testing:

- a. *Show title screen mockup (fig. 1)*
 - i. Here's the opening menu screen for our game. *pause*
 - ii. What are your first thoughts?
 - iii. Explain how you think this screen would work?
 - iv. How would you start the game?
 - v. What do you like? What bothers you?
 - vi. Okay, let's move on.
- b. *Show loading screen mockup (fig. 2)*
 - i. Let's assume this is what you see when you've started the game, while it loads. *pause*
 - ii. First thoughts?
 - iii. Do you see anything that you don't understand?
 - iv. What do you think this screen is about?
 - v. What do you expect will happen once the game has loaded?
 - vi. Awesome, let's move on to the first levels!
- c. *Show Walls tutorial mockup (fig. 3)*
 - i. Here is an example of the type of environment you'll be walking through.
 - ii. What do you believe is the objective of this room?

- iii. How do you believe you would complete that objective?
 - iv. What part of the structure of the environment indicates the objective?
 - v. How do you feel the room or environment could be structured better to indicate the objective of this room?
 - vi. Let's move on to the next tutorial room!
- d. *Show Interaction Tutorial Room (fig. 4, 5, 6, 7, and 8)*
- i. Tutorial1: Let me introduce you to the basic functionality (fig. 5)
 - 1. What gesture would you make to pick up the ball?
 - 2. What gesture would you make to move the ball into the zone?
 - ii. Tutorial 2: Gesture Tutorial (fig. 6)
 - 1. Do you understand what the instructions are asking?
 - 2. In the scale of 1 to 10, how would you rate the difficulty of these interactions?
 - iii. Tutorial 3: Logic (fig. 7)
 - 1. Can you imagine yourself changing the colors and locations of the ball at the same time?
 - 2. This game is an integration of changing music, color, and size of different kinds of object. As you are accomplishing this task, you will be entering into the final stage of the tutorial.
 - iv. Tutorial 4: Introduction to main game level(s) (fig. 8)
 - 1. Okay, Now you have reached the last tutorial.
 - 2. How do you feel when you see the door portal?
 - 3. What is your basic instinct of action when seeing the door portal?
 - 4. What previous experience has lead you to do these specific actions (within the game or real life)?
 - 5. YOU FINISHED! YAY!

3. Concluding Remarks

- e. Okay, now you have a pretty good idea of the game and it's concepts.
- f. Do you have any questions about the game?
- g. Did you find anything to be confusing?
- h. Does anything need more description to make sense?
- i. What things do you like about the concept?
- j. Could any of these concepts be improved? How so/why?

Figures for Script

Figure 1: Starting Screen

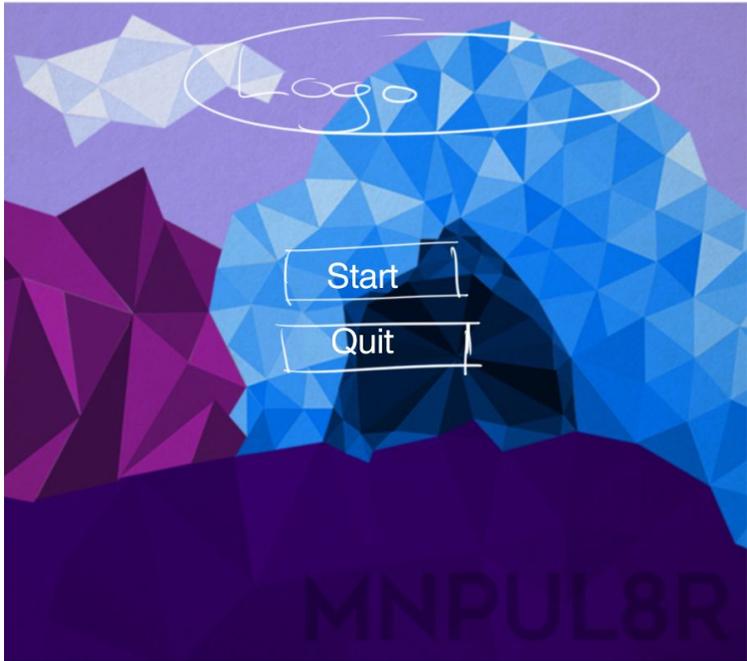


Figure 2: Loading Screen

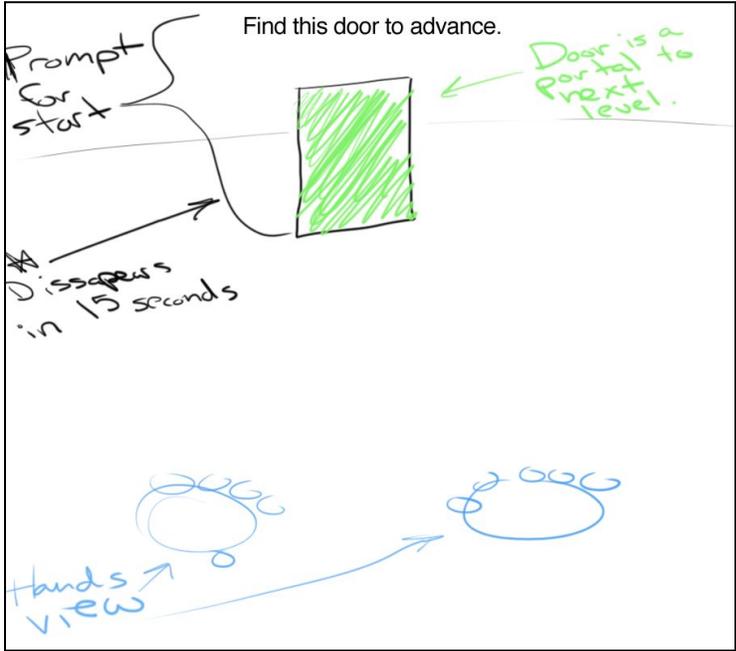


Figure 3: Environment Tutorial

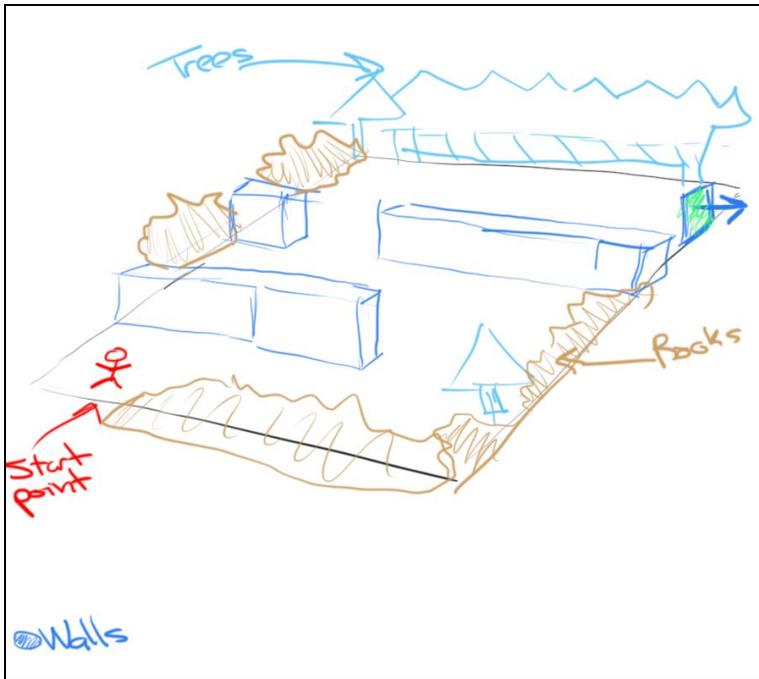


Figure 4: Manipulation Tutorial Room

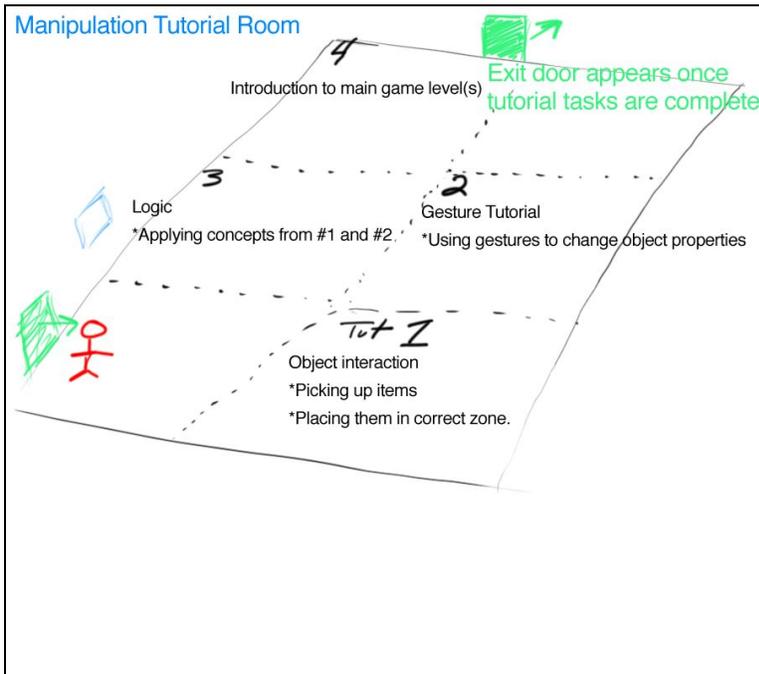


Figure 5: Manipulation Tutorial Room 1

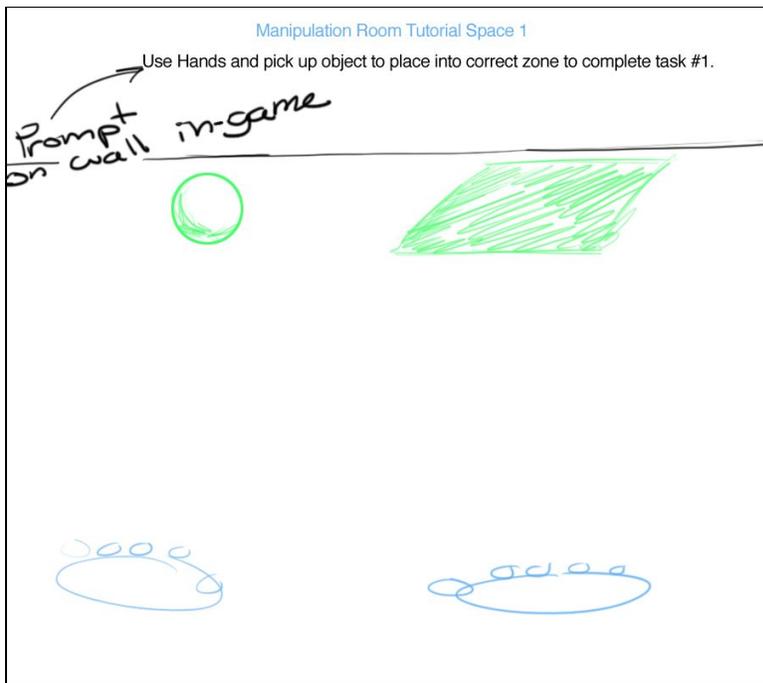


Figure 6: Manipulation Tutorial Room 2

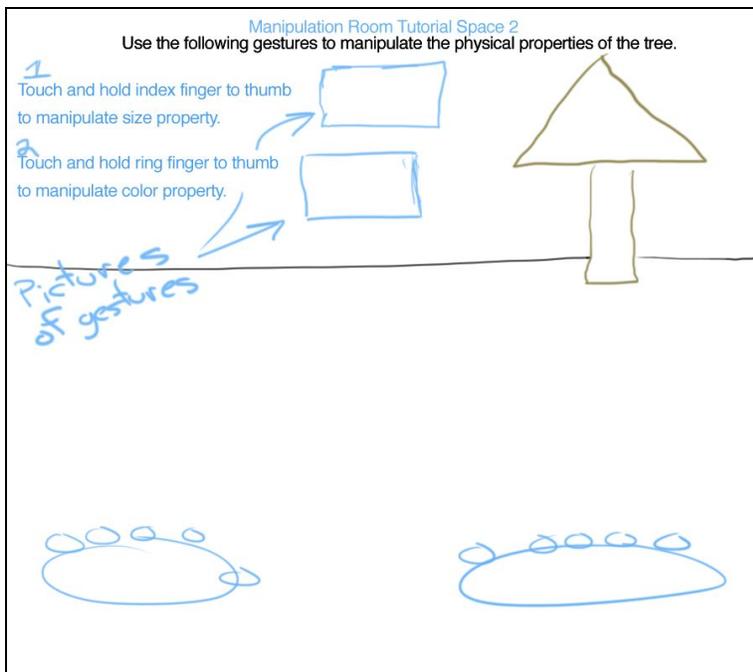


Figure 7: Manipulation Tutorial Room 3

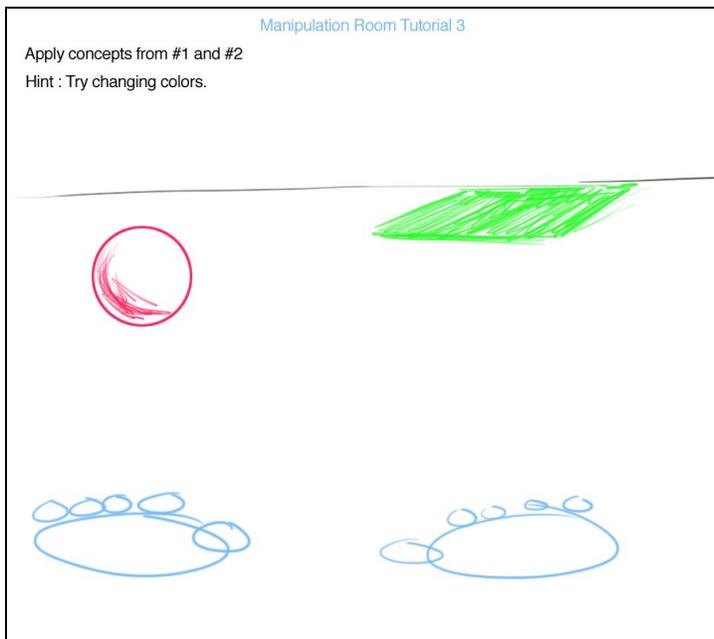
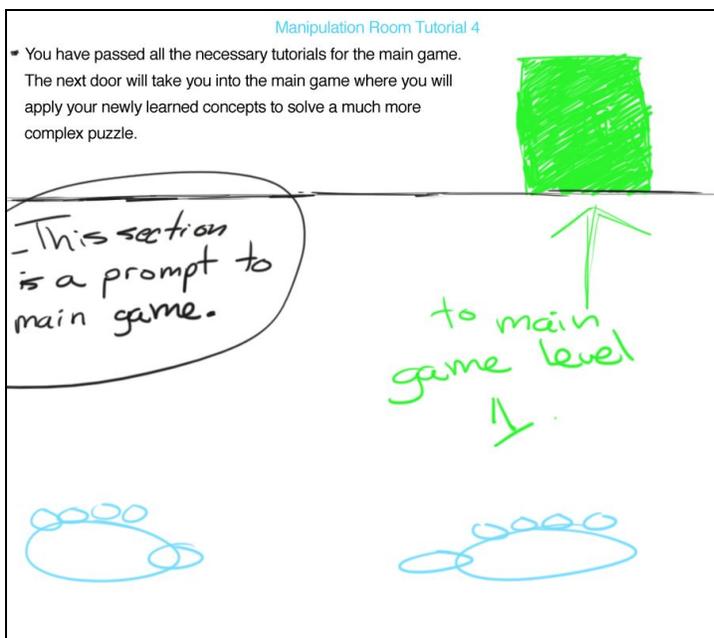


Figure 8: Manipulation Tutorial Room 4



Individual Test: Minwoo

3. Introduction:

- a. Hello, What is your name?
 - i. *“Minwoo Park”*
- b. What is your occupation, what do you do?
 - i. *“Decline to respond”*
- c. If you had to guess how many hours a week you spend playing video games?
 - i. *“I estimate about 15-20 hours a week.”*
- d. If so, what kind of games? What kind are your favorite?
 - i. *“I would say 3rd person shooter and strategy are my favorite, Warframe and XCOM.”*
- e. Do you have any previous experience using virtual reality systems?
 - i. *“No”*
- f. If so, what VR game/experience did you have?
 - i. *N/A*
- g. Excellent, now that we have some background info out of the way, let's take a look at the game!
- h. We're going to show you some images and cover some of the game's concepts.
- i. Once we are done with a concept, we will ask you for some input.
- j. Everything goes here, we're still early in development and we're looking for anything you could possibly have to say.
- k. Please be open and don't worry about hurting our feelings, we want to improve the game and realize there are still lots of tweaks to be made.
- l. Okay, ready? Let's begin!

4. Testing:

- a. *Show title screen mockup (fig. 1)*
 - i. Here's the opening menu screen for our game. *pause*
 - ii. What are your first thoughts?
 1. *“No options, mess with display and settings for people who want different brightness, volume, etc.”*
 - iii. Explain how you think this screen would work?
 1. *“Imagine you would have a cursor and you would be able to select start or quit. Recommend doing a cursor system. Flash to see which one you're on.”*
 - iv. How would you start the game?
 1. *“Click on start”*
 - v. What do you like? What bothers you?
 1. *“It's pretty simple and straightforward, options between start and quit would be nice.”*

- vi. *“The top one I just squeeze and hold it? Do I like toggle it? Or flick to stretch and shrink? It says touch and hold.”*
 - a. *“Touching and holding is a little vague, if I continue holding will it remain the same or will it continually change. The word hold is confusing. If it’s a press it’s a button press that you eventually let go of, hold you don’t let go.”*
- 2. On a scale of 1 to 10, how would you rate the difficulty of these interactions?
 - a. *“I don’t know. I imagine if it would be pretty simple if you lined up your hand to the object, probably about a 4.”*
- vii. Tutorial 3: Logic (fig. 7)
 - 1. Can you imagine yourself changing the colors and locations of the ball at the same time?
 - a. *“Yes, I’d grab it with my left hand and gesture with my right hand to change the color. Other than that, I’d imagine it would be pretty impossible.”*
 - 2. This game is an integration of changing music, color, and size of different kinds of objects. As you are accomplishing this task, you will be entering into the final stage of the tutorial.
- viii. Tutorial 4: Introduction to main game level(s) (fig. 8)
 - 1. Okay, Now you have reached the last tutorial.
 - 2. How do you feel when you see the door portal?
 - a. *“Good, I feel like it’s a good physical representation of progression to the end of the tutorial and now that I have completed the tutorial I can enter the actual game. You show that you’re leaving the tutorial and going to the game.”*
 - 3. What is your basic instinct of action when seeing the door portal?
 - a. *“Walk to it, walk into it or through it.”*
 - 4. What previous experience has lead you to do these specific actions (within the game or real life)?
 - a. *“You walk through doors, doors are meant to be walked through.”*
 - 5. YOU FINISHED! YAY!

5. Concluding Remarks

- a. Okay, let’s move on.
- 6. *Show loading screen mockup (fig. 2)*
 - a. Let’s assume this is what you see when you’ve started the game, while it loads.
pause
 - b. First thoughts?
 - i. *“Get to the green door”*

- c. Do you see anything that you don't understand?
 - i. *"Not really, the hands are pretty self-explanatory."*
 - d. What do you think this screen is about?
 - i. *"Entering into the tutorial section of the game"*
 - e. What do you expect will happen once the game has loaded?
 - i. *"To be in the game and surrounded by a VR environment"*
 - f. Awesome, let's move on to the first levels!
7. *Show Walls tutorial mockup (fig. 3)*
- a. Here is an example of the type of environment you'll be walking through.
 - b. What do you believe is the objective of this room?
 - i. *"Get to the green door again"*
 - c. How do you believe you would complete that objective?
 - i. *"I would imagine you can't jump or climb the walls, so you would have to complete the maze."*
 - d. What part of the structure of the environment indicates the objective?
 - i. *"The arrow pointing towards the door, forward is the only way you can go so you'd end up by going towards the green door instinctively."*
 - e. How do you feel the room or environment could be structured better to indicate the objective of this room?
 - i. *"Seeing the door from the start might help, putting the door on a hill so you can see where you want to end up."*
 - f. Let's move on to the next tutorial room!
8. *Show Interaction Tutorial Room (fig. 4, 5, 6, 7, and 8)*
- a. Tutorial1: Let me introduce you to the basic functionality (fig. 5)
 - i. What gesture would you make to pick up the ball?
 - 1. *"Grabbing motion using all fingers"*
 - ii. What gesture would you make to move the ball into the zone?
 - 1. *"Side motion to the zone and then dropping it, or possibly pushing it because it is circular."*
 - b. Tutorial 2: Gesture Tutorial (fig. 6)
 - i. Do you understand what the instructions are asking?
 - c. Okay, now you have a pretty good idea of the game and it's concepts.
 - d. Do you have any questions about the game?
 - i. *"So, is the point of the game the manipulation of objects or is it a maze? Do the doors unlock once you reach the end of the level?"*
 - e. Did you find anything to be confusing?
 - i. *"No, the touch and hold part mostly."*
 - f. Does anything need more description to make sense?

- i. "Not really, I feel like it will make more sense once someone describes it in person."*
- g. What things do you like about the concept?
 - i. "I like being able to manipulate the objects, I think it's an awesome VR experience."*
- h. Could any of these concepts be improved? How so/why?
 - i. "I never saw the point of why I needed to change the size/color, but you could easily make a green square peg and a round red hole and you have to match the colors and shapes together."*

Individual Test: Christian

9. Introduction:

- a. Hello, What is your name?
 - i. *“Christian Whiteman.”*
- b. What is your occupation, what do you do?
 - i. *“I own and manage a pizza restaurant that my family has owned since 1953.”*
- c. If you had to guess how many hours a week you spend playing video games?
 - i. *“At least 10, maybe 15 hours a week. Probably more like 25+.” *laughing**
- d. If so, what kind of games? What kind are your favorite?
 - i. *“I like to play lots of different games. Sometimes I’m feelin’ a first person shooter or an arcade-style like ‘Rocket League’, but I also like simulators like ‘Kerbal Space Program’. I also have a Vive and love to test all kinds of VR games that look interesting.”*
- e. Do you have any previous experience using virtual reality systems?
 - i. *“Yeah. I own a Vive, like I said, and I like to use it when I can.”*
- f. If so, what VR game/experience did you have?
 - i. *“I like to try out different VR apps and games as I find ‘em. Recently (Google’s) ‘Tilt Brush’ and their VR port of ‘Google Earth’, But for games, I really like ‘Elite Dangerous’, which is kinda like a space flight simulator. I’ve tried a lot of different stuff out on my Vive.”*
- g. Excellent, now that we have some background info out of the way, let’s take a look at the game!
- h. We’re going to show you some images and cover some of the game’s concepts.
- i. Once we are done with a concept, we will ask you for some input.
- j. Everything goes here, we’re still early in development and we’re looking for anything you could possibly have to say.
- k. Please be open and don’t worry about hurting our feelings, we want to improve the game and realize there are still lots of tweaks to be made.
- l. Okay, ready? Let’s begin!

10. Testing:

- a. *Show title screen mockup (fig. 1)*
 - i. Here’s the opening menu screen for our game. *pause*
 - ii. What are your first thoughts?
 1. *“Well, it looks pretty basic. It’s got your standard title and ‘Start Game’ button and stuff. The artwork is pretty neat though.”*
 - iii. Explain how you think this screen would work?

1. *“Uh, I guess you probably hit start and then the game plays. The quit button would exit the game.”*
 - iv. How would you start the game?
 1. **Blank stare* “You hit start...”*
 - v. What do you like? What bothers you?
 1. *“I like the art. It looks nice and simple. It doesn’t tell you much about the game though.”*
 - vi. Okay, let’s move on.
- b. *Show loading screen mockup (fig. 2)*
- i. Let’s assume this is what you see when you’ve started the game, while it loads. **pause**
 - ii. First thoughts?
 1. *“It looks like a tip screen or something you’d see in a game while you’re loading that tells you tricks, but it’s real basic, like concept art.”*
 - iii. Do you see anything that you don’t understand?
 1. *“Not too sure what ‘dissappears in 15 seconds’ means.”*
 - iv. What do you think this screen is about?
 1. *“Maybe it’s a tutorial or something. So it looks like I need my hands and the door portal thing is the end of a level.”*
 - v. What do you expect will happen once the game has loaded?
 1. *“I’ll be in the game looking for the door somewhere.”*
 - vi. Awesome, let’s move on to the first levels!
- c. *Show Walls tutorial mockup (fig. 3)*
- i. Here is an example of the type of environment you’ll be walking through.
 - ii. What do you believe is the objective of this room?
 1. *“To get to the door past those walls and stuff.”*
 - iii. How do you believe you would complete that objective?
 1. *“I’d make my way around the walls and look for the portal.”*
 - iv. What part of the structure of the environment indicates the objective?
 1. *“What do you mean?”... *explains question* ... “Oh, it’s the green portal from the other one so I know that’s where I wanna be.”*
 - v. How do you feel the room or environment could be structured better to indicate the objective of this room?
 1. *“Maybe add some detail or more walls to make it less of a straight line, like I gotta look for the door in different places.”*
 - vi. Let’s move on to the next tutorial room!
- d. *Show Interaction Tutorial Room (fig. 4, 5, 6, 7, and 8)*
- i. Tutorial1: Let me introduce you to the basic functionality (fig. 5)

1. What gesture would you make to pick up the ball?
 - a. **Moves arms as if grabbing a handle in front of him* "Like that?"*
2. What gesture would you make to move the ball into the zone?
 - a. **Grabs forward and moves arm in an arc from the left to the right**
- ii. Tutorial 2: Gesture Tutorial (fig. 6)
 1. Do you understand what the instructions are asking?
 - a. *"Looks like I can change some colors and sizes if I pinch my fingers together. Not real sure what I'm changing a tree for though or why."*
 2. In the scale of 1 to 10, how would you rate the difficulty of these interactions?
 - a. *"Probably like a 6 or 7 since it seems easy, but I don't know really what happens when I've changed the color and size of it."*
- iii. Tutorial 3: Logic (fig. 7)
 1. Can you imagine yourself changing the colors and locations of the ball at the same time?
 - a. *"Uh, yeah, but if I picked it up I'd probably just hold it while I change the colors and then move it once I get it set right."*
 2. This game is an integration of changing music, color, and size of different kinds of object. As you are accomplishing this task, you will be entering into the final stage of the tutorial.
- iv. Tutorial 4: Introduction to main game level(s) (fig. 8)
 1. Okay, Now you have reached the last tutorial.
 2. How do you feel when you see the door portal?
 - a. *"Well, I can do some cool stuff and play around with some things. I feel like I'm probably gonna need to do this stuff in the rest of the game."*
 3. What is your basic instinct of action when seeing the door portal?
 - a. *"Go in it."*
 4. What previous experience has lead you to do these specific actions (within the game or real life)?
 - a. *"Just playing other games and, I mean, the grabbing stuff is like real life. The changing stuff is kinda neat but might be confusing. I just know that from the tutorials."*
 5. YOU FINISHED! YAY!

11. Concluding Remarks

- a. Okay, now you have a pretty good idea of the game and it's concepts.

- b. Do you have any questions about the game?
 - i. *“No, not really. I guess I’d like to give this a try with that sensor on my Vive because I didn’t know about it.”*
- c. Did you find anything to be confusing?
 - i. *“Just how changing stuff like the music would work later.”*
- d. Does anything need more description to make sense?
 - i. *“More about the changing stuff.”*
- e. What things do you like about the concept?
 - i. *“The changing stuff and using your hands is really neat. I’m used to the Vive controllers so it would be cool to see.”*
- f. Could any of these concepts be improved? How so/why?
 - i. *“Maybe add some detail on the different changes because it’s kinda confusing.”*

Individual Test: Xavier

12. Introduction:

- a. Hello, What is your name?
 - i. *"Xavier Murphy."*
- b. What is your occupation, what do you do?
 - i. *"None right now. I'm in high school."*
- c. If you had to guess how many hours a week you spend playing video games?
 - i. *"About 6 hours."*
- d. If so, what kind of games? What kind are your favorite?
 - i. *"I own an Xbox One. I really like shooters but my favorite games are the Call of Duty games."*
- e. Do you have any previous experience using virtual reality systems?
 - i. *"None."*
- f. If so, what VR game/experience did you have?
 - i. *N/A*
- g. Excellent, now that we have some background info out of the way, let's take a look at the game!
- h. We're going to show you some images and cover some of the game's concepts.
- i. Once we are done with a concept, we will ask you for some input.
- j. Everything goes here, we're still early in development and we're looking for anything you could possibly have to say.
- k. Please be open and don't worry about hurting our feelings, we want to improve the game and realize there are still lots of tweaks to be made.
- l. Okay, ready? Let's begin!

13. Testing:

- a. *Show title screen mockup (fig. 1)*
 - i. Here's the opening menu screen for our game. *pause*
 - ii. What are your first thoughts?
 1. *"This is cool. I like that it is simple."*
 - iii. Explain how you think this screen would work?
 1. *"You select 'Start' to begin the game or 'Quit' to close the game."*
 - iv. How would you start the game?
 1. *"My guess is that you select the 'Start' option to begin."*
 - v. What do you like? What bothers you?
 1. *"I guess right now it's a little blank."*
 - vi. Okay, let's move on.
- b. *Show loading screen mockup (fig. 2)*

- i. Let's assume this is what you see when you've started the game, while it loads. **pause**
 - ii. First thoughts?
 - 1. *"This is cool."*
 - iii. Do you see anything that you don't understand?
 - 1. *"Yeah, so the door is what I'm supposed to find?" - Yes.*
 - iv. What do you think this screen is about?
 - 1. *"Showing me what I need to find in the level, I guess."*
 - v. What do you expect will happen once the game has loaded?
 - 1. *"I will start the game like maybe be put in the level or something."*
 - vi. Awesome, let's move on to the first levels!
- c. **Show Walls tutorial mockup (fig. 3)**
- i. Here is an example of the type of environment you'll be walking through.
 - ii. What do you believe is the objective of this room?
 - 1. *"To find the door that was shown in the beginning right?" - Yup!*
 - iii. How do you believe you would complete that objective?
 - 1. *"I guess by walking around here till I find it."*
 - iv. What part of the structure of the environment indicates the objective?
 - 1. *"The prompt shown in the beginning of the level with the picture of the door."*
 - v. How do you feel the room or environment could be structured better to indicate the objective of this room?
 - 1. *"Maybe show a picture of the door again to remind me of what I need to find."*
 - vi. Let's move on to the next tutorial room!
- d. **Show Interaction Tutorial Room (fig. 4, 5, 6, 7, and 8)**
- i. Tutorial 1: Let me introduce you to the basic functionality (fig. 5)
 - 1. What gesture would you make to pick up the ball?
 - a. *"Not sure I guess I want to try to just pick it up like I would in real life."*
 - 2. What gesture would you make to move the ball into the zone?
 - a. *"Just by continuing to hold the ball and move it to the zone."*
 - ii. Tutorial 2: Gesture Tutorial (fig. 6)
 - 1. Do you understand what the instructions are asking?
 - a. *"Yeah I have to make those gestures with my hand to change the tree right?" -Yeah, good!*
 - 2. In the scale of 1 to 10, how would you rate the difficulty of these interactions?

- a. *“7 because I don’t necessarily understand how this will work or with what kind of controller.”*
 - iii. Tutorial 3: Logic (fig. 7)
 - 1. Can you imagine yourself changing the colors and locations of the ball at the same time?
 - a. *“Yeah I guess I would probably change the color first then move the ball.”*
 - 2. This game is an integration of changing music, color, and size of different kinds of object. As you are accomplishing this task, you will be entering into the final stage of the tutorial.
 - iv. Tutorial 4: Introduction to main game level(s) (fig. 8)
 - 1. Okay, Now you have reached the last tutorial.
 - 2. How do you feel when you see the door portal?
 - a. *“I want to walk into it and see what is the next level.”*
 - 3. What is your basic instinct of action when seeing the door portal?
 - a. *“To walk through it.”*
 - 4. What previous experience has lead you to do these specific actions (within the game or real life)?
 - a. *“I’ve seen this door before so I guess just walk through it to move on to the next level.”*
 - 5. YOU FINISHED! YAY!

14. Concluding Remarks

- a. Okay, now you have a pretty good idea of the game and it’s concepts.
- b. Do you have any questions about the game?
 - i. *“What type of controller are you going to be using for gestures. Really cool idea.”*
- c. Did you find anything to be confusing?
 - i. *“I guess the idea of using gestures is a little confusing now because you guys don’t have the hardware yet but it sounds really awesome.”*
- d. Does anything need more description to make sense?
 - i. *“Yeah from what you’ve showed me the tutorial areas might need more description for the player when that part is built. Because right now it seems a little vague.”*
- e. What things do you like about the concept?
 - i. *“I think it’s really cool that you guys are going to be using a controller to control the game with your hands. Never played a VR game before but I know what the controllers look like and they are not hand controllers like yours.”*
- f. Could any of these concepts be improved? How so/why?
 - i. *“Not really. If anything I think that the more you guide the user the better. Especially for something as crazy as what you guys are doing.”*

Individual Test: Natalia

1. Introduction:

- g. Hello, What is your name?
 - i. *“Natalia Petrov”*
- h. What is your occupation, what do you do?
 - i. *“I’m an associate instructor of music and pursuing my doctorate degree in Piano Performance”*
- i. If you had to guess how many hours a week you spend playing video games?
 - i. *“I don’t play video games”*
- j. If so, what kind of games? What kind are your favorite?
 - i. *N/A*
- k. Do you have any previous experience using virtual reality systems?
 - i. *“No”*
- l. If so, what VR game/experience did you have?
 - i. *N/A*
- m. Excellent, now that we have some background info out of the way, let’s take a look at the game!
- n. We’re going to show you some images and cover some of the game’s concepts.
- o. Once we are done with a concept, we will ask you for some input.
- p. Everything goes here, we’re still early in development and we’re looking for anything you could possibly have to say.
- q. Please be open and don’t worry about hurting our feelings, we want to improve the game and realize there are still lots of tweaks to be made.
- r. Okay, ready? Let’s begin!

2. Testing:

- s. *Show title screen mockup (fig. 1)*
 - i. Here’s the opening menu screen for our game. *pause*
 - ii. What are your first thoughts?
 - 1. *“It just looks like a menu screen”*
 - iii. Explain how you think this screen would work?
 - 1. *“You click on whichever you want”*
 - iv. How would you start the game?
 - 1. *“By clicking the start button”*
 - v. What do you like? What bothers you?
 - 1. *“I don’t know, I guess. Nothing bothers me right now but I will have to see.”*
 - vi. Okay, let’s move on.
- t. *Show loading screen mockup (fig. 2)*

- i. Let's assume this is what you see when you've started the game, while it loads. **pause**
 - ii. First thoughts?
 - 1. *"It's alright"*
 - iii. Do you see anything that you don't understand?
 - 1. *"I see the controllers. Are they hands?" (Response: Yes)*
 - 2. *"How am I supposed to move?" (Response: You will learn soon enough)*
 - iv. What do you think this screen is about?
 - 1. *"I should probably enter that door"*
 - v. What do you expect will happen once the game has loaded?
 - 1. *"I'm not sure what to expect"*
 - vi. Awesome, let's move on to the first levels!
- u. *Show Walls tutorial mockup (fig. 3)*
- i. Here is an example of the type of environment you'll be walking through.
 - ii. What do you believe is the objective of this room?
 - 1. *"Uhm, I should probably go through this level and teach the green door?"*
 - iii. How do you believe you would complete that objective?
 - 1. *"Find my way to to the door"*
 - iv. What part of the structure of the environment indicates the objective?
 - 1. *"The green door"*
 - v. How do you feel the room or environment could be structured better to indicate the objective of this room?
 - 1. *"I don't really know what to say(laughs)"*
 - vi. Let's move on to the next tutorial room!
- v. *Show Interaction Tutorial Room (fig. 4, 5, 6, 7, and 8)*
- i. Tutorial1: Let me introduce you to the basic functionality (fig. 5)
 - 1. What gesture would you make to pick up the ball?
 - a. *"I would use my thumb and index fingers to pick it up"*
 - 2. What gesture would you make to move the ball into the zone?
 - a. *"I would do it just like how I would it in real life"*
 - ii. Tutorial 2: Gesture Tutorial (fig. 6)
 - 1. Do you understand what the instructions are asking?
 - a. *"Yes, kind of, I can use my fingers to change the size and colors of the boxes with my fingers"*
 - 2. In the scale of 1 to 10, how would you rate the difficulty of these interactions?
 - a. *"7 because I don't know if I will be able to do it since I have no previous experience of doing it."*

- iii. Tutorial 3: Logic (fig. 7)
 - 1. Can you imagine yourself changing the colors and locations of the ball at the same time?
 - a. *"Yes but I feel like it is going to take me some time to figure it out."*
 - 2. This game is an integration of changing music, color, and size of different kinds of object. As you are accomplishing this task, you will be entering into the final stage of the tutorial.
- iv. Tutorial 4: Introduction to main game level(s) (fig. 8)
 - 1. Okay, Now you have reached the last tutorial.
 - 2. How do you feel when you see the door portal?
 - a. *"I don't know, I feel like I have to enter the portal"*
 - 3. What is your basic instinct of action when seeing the door portal?
 - a. *"I would enter the portal"*
 - 4. What previous experience has lead you to do these specific actions (within the game or real life)?
 - a. *"I mean, the only option I see is entering the door, what else would I do?"*
 - 5. YOU FINISHED! YAY!

3. Concluding Remarks

- w. Okay, now you have a pretty good idea of the game and it's concepts.
- x. Do you have any questions about the game?
 - i. *"Not really"*
- y. Did you find anything to be confusing?
 - i. *"I mean the entire game is kinda confusing. I understand what I'm supposed to do but I'm not sure if I would enjoy the game"*
- z. Does anything need more description to make sense?
 - i. *"It might be better if I can see someone else, maybe like an avatar doing the tutorials that I'm supposed to do. I'm not very familiar with the terminology so that would be helpful for someone like me who doesn't have much of gaming experience"*
- aa. What things do you like about the concept?
 - i. *"I like that I can control objects with fingers. It doesn't take that much effort."*
- bb. Could any of these concepts be improved? How so/why?
 - i. *"Are you going to have any more of interactions? (Response: Yes, We are planning on building more gestures and interesting objects that the players can manipulate with) It would be nice to have some cool objects or places that don't exist in real life."*

Testing Photos:

