UDACITY PUZZLER PROJECT DOCUMENTATION

This documentation was created to demonstrate the workflow of the Udacity course Puzzler project created by Borbala Menyhart.

PUZZLER PROJECT

In the Puzzler project I created a Simon says type of game.

The game is a Cardboard VR game, the targeted device is Android. The targeted audience is not specialized for any certain criteria.

MY WORKING PROCESS

I selected a person how was my audience and test partner through the working process.


Adam, *39 -Software Developer*

" Sci-fi inventions became reality"

Adam is an experienced software developer, he is interested in new technologies, gadgets and follows how the information technology develops. He thinks VR technology is more than a tool to entertain people, but he likes fun, too. Now he wants to play and to be a bit impressed as well.

VR experience: *He have tried some Google Cardboard apps already.*

I started my work with sketching the game scene and design the UI.

The game scene is a dungeon where the player will solve a Simon says puzzle. The atmosphere is meant to be scary, a bit spooky. The user can start and restart the game via the UI.
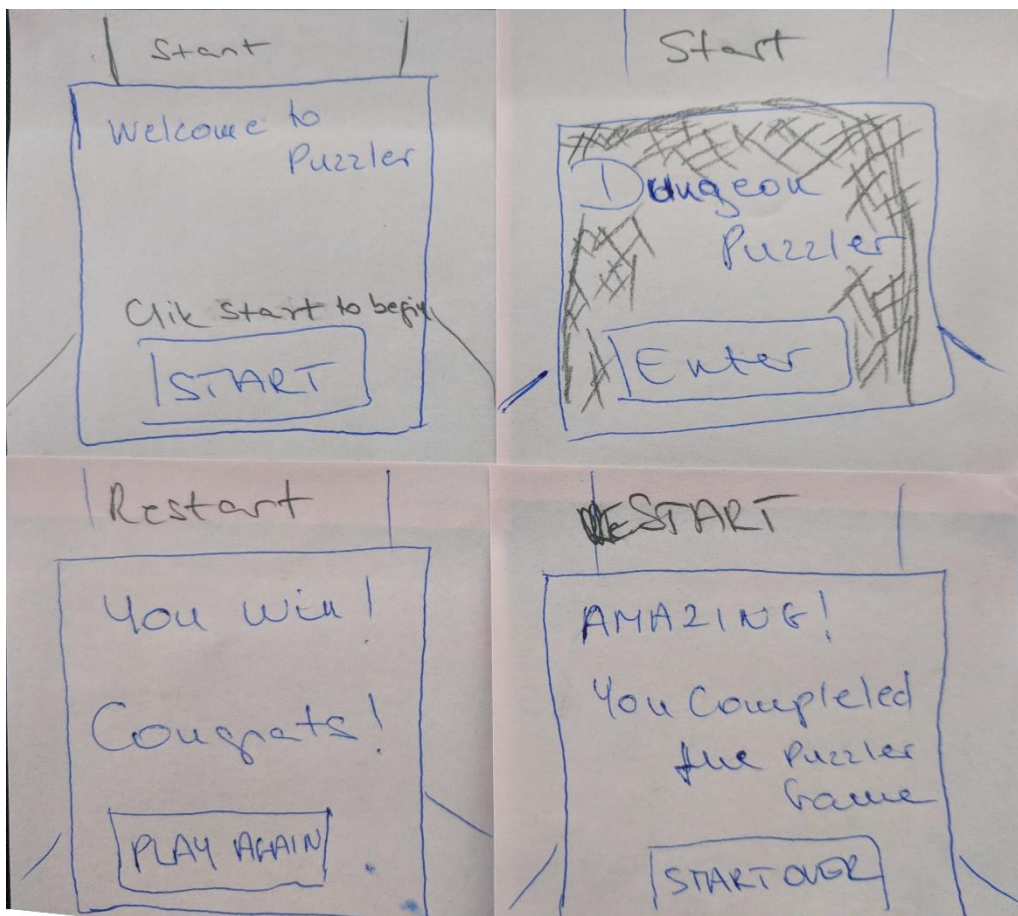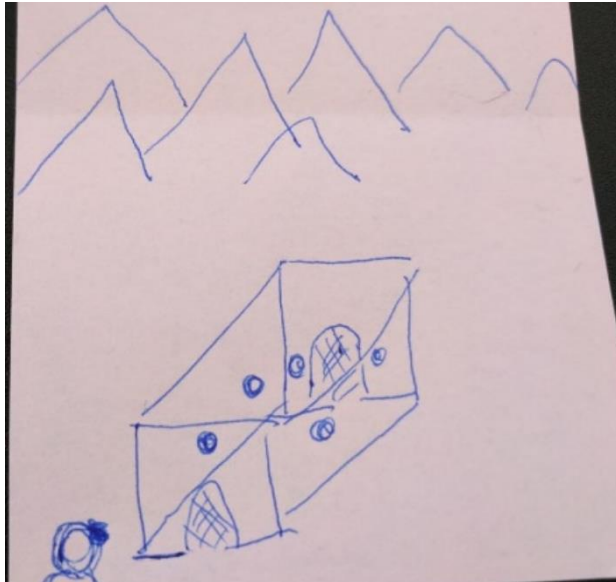
Through the developing process I made user tests to see how the project developed from my user's perspective.

I. First User Test (game scene)
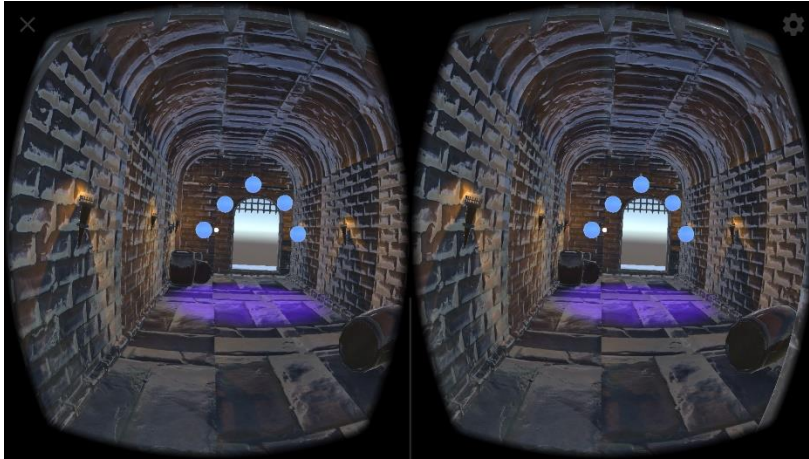
Test Questions
User answers
Developer comment

a) Could you tell me how big you think you are in this experience?
I would say like my real-life size.
That's good, that was the goal.

b) What would you say is the mood of the place that you're in? What's the atmosphere like?
A bit spooky, like a medieval cell.
The environment looks as it was meant.

c) Is there anything that you'd like to look at but that's difficult to see or that's not coming out very well visually for you?
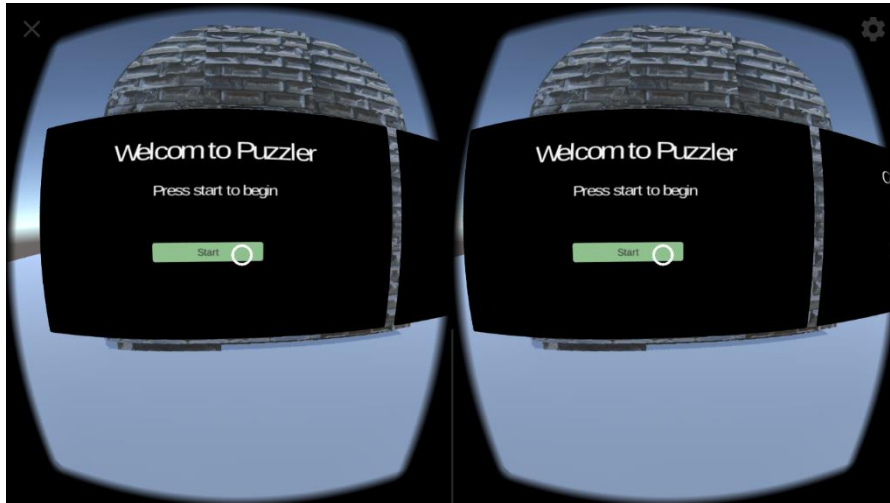Inside everything looks good, outside there is nothing to see. Are we in empty space? Orb style does not match with the atmosphere of the place. There is a hole on the roof?!
Developer: I will add some skybox to the environment. The orbs will make sense later.
I will fix the roof.

II.   *Second User Test (UI)*

DownloadI test video: https://github.com/bmenyhart/udacity-vr-p4-puzzler-project-writeup/blob/master/PuzzlerUITestVideo.mp4

Test Questions
User answers
Developer comment

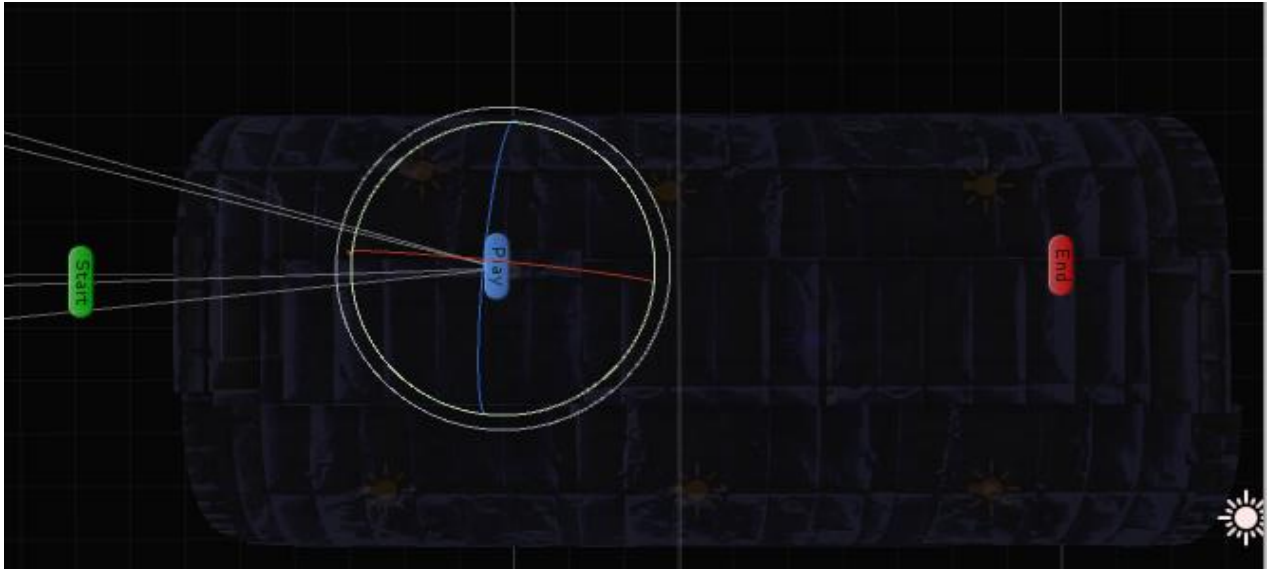a)   What do you think those panels are for?
I can start or restart the game with the buttons on the panels.

b)   What do you think about the readability?
I can see and read everything comfortable.
The user found the text readable and easily understood how to interact with the UI.

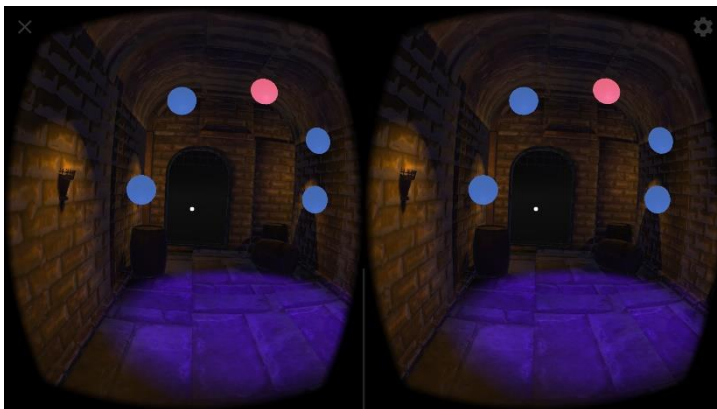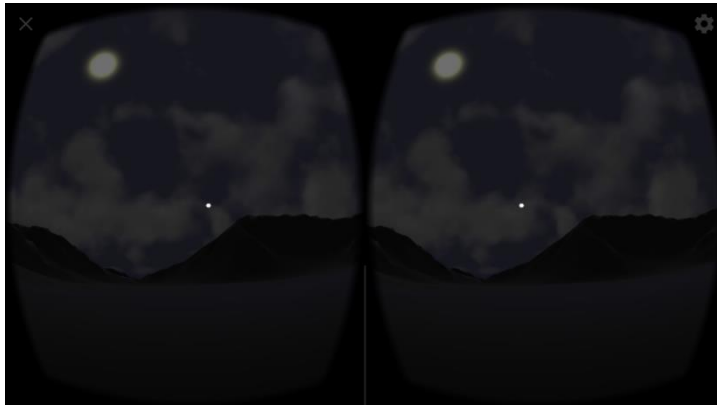## III.   *Third User Test (Moving in the game)*

Test Questions
User answers
Developer comment

a) **After start: (time setting was "2")** How did you feel about the speed of the movement? Did you experience any discomfort or dizziness?
I felt the pace comfortable. I did not experience any discomfort at all.

b) **After moved to the end: (time setting was "2")** How did you feel about the speed of the movement? Did you experience any discomfort or dizziness?
I felt the pace and the distance of the movement unpleasant. I felt dizziness at the end of the moving.

c) **After moved to the end: (time setting was "4")** How did you feel about the speed of the movement? Did you experience any discomfort or dizziness?
I felt the pace better, but the duration of the moving is still long, and I felt dizziness at the end.

d) **After reset ing and moving back to the start point: (the movement was instant like moving between waypoints)** How did you feel about the speed of the movement? Did you experience any discomfort or dizziness?
I like this instant movement way much than the simulated movement.
I will adjust the location of the start, play, and the endpoints. I will consider placing waypoints in the game and using them for moving the player.

e) Did you bump into anything while moving in the game?
I did not at all.

THE FINAL RESULT AND TEST

The game scene is a dungeon where the player will solve a Simon says puzzle. The atmosphere is meant to be scary, a bit spooky. The user can start and restart the game via the UI.

Download test video: https://github.com/bmenyhart/udacity-vr-p4-puzzler-project-writeup/blob/master/FinalTest.mp4

Test Questions
User answers
Developer comment

a) **The location of the start, play and the endpoints and the motion speed were adjusted.** How did you feel about the speed of the movement? Did you experience any discomfort or dizziness?
I felt the pace and the distance comfortable. I did not experience any discomfort at all anymore.

b) **The surrounding area and the sound were set.** What do you think about the overall atmosphere?
I enjoyed it very much, the sounds and the night sky were very spooky.

I liked the game though I missed the sequence at the first time because *I looked around* and I did not realize that I have to focus on those orbs. I would play more.

CONCLUSION

The game works properly on Android device. The VR experience met with the expectations and the user was happy with the game.

NEXT STEPS

The game can be extended with more puzzles or timer to add more challenge to the experience.