GNG 1103 Project Deliverable H: Prototype III

Group 7

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Introduction

This deliverable will outline our past prototypes, test plans, and future project plans. Firstly, we will analyze the results of previous test plans and note any changes made from previous prototypes. Next, we will develop prototyping objectives and an updated test plan. Finally, we will create a detailed project task plan for any items remaining before the next design phase.

# Analysis/Results of the Previous Prototype Test Plan

Our initial concepts and first prototype featured an underground tunnel and a residential house as our setting. We intended to illustrate the shift in society and the hopelessness through sounds of the drones/destruction. We received feedback from peers and clients expressing how cutting down the setting and story to something simpler will be more impactful. For our second prototype, we abandoned the underground portion of the setting and focused on the broken-in residential house/shop as our one setting. By transforming the house/shop into a crime scene, we delved into a new theme of the imperfect nature of the robots (unpredictability) and the danger they pose to all humans no matter any classifications.

Test ID	Test Objective (Why)	Results	Analysis
1	Evaluation of VR functionality	Successful	The VR is working as expected, elements are being implemented without issue and the animations are going smoothly.
2	Evaluation of VR Environment design	Unsuccessful	Feedback was gathered from users. The VR environment does not show the adaption to the autonomous weapons enough, and is not specific enough.
3	Evaluation of character implementation	Successful	The character is implemented fully, with finished animations.
4	Evaluate audio and dialogue implementation	Incomplete	We are currently working on implementing the audio and dialogue to the prototype
5	Story Evaluation	Successful	Users have given positive feedback on the story content and

			structure.
6	Final Review	Incomplete	Have not completed the project yet, and therefore not ready for final review.

Prototype Pictures
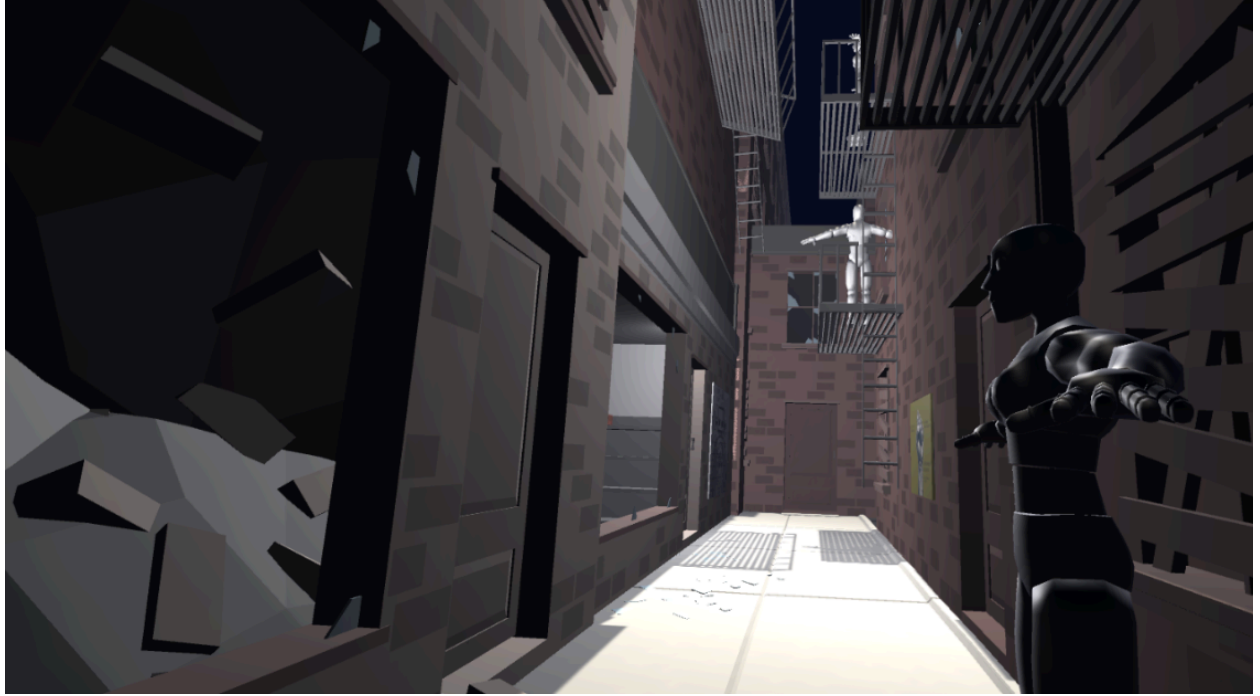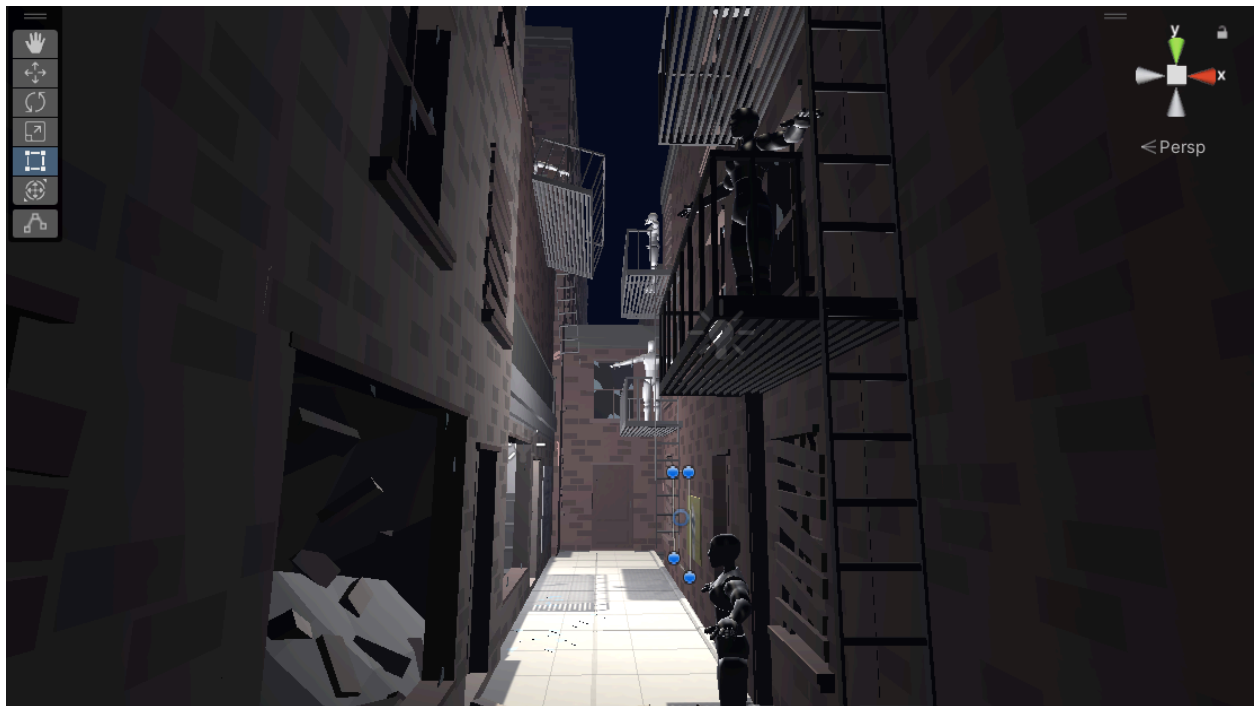
Analysis of Current Prototype

Changes Made

      For our third prototype, our big focus was enhancing our environment to really bring realism to the VR experience. One way we did this was truly implementing our dialogue. We were able to

successfully implement our script into our VR world so when the user hits a certain point the script will start and the user will be able to read, as well as hear what the other character is saying throughout the experience. We got feedback about how we need to focus more on how humans would change their environment due to autonomous weapons because this was important to the client. Due to this great feedback we have now changed our environment, showing several aspects . We have also enhanced the realism by giving the character the user is talking to animations while talking. This makes it feel more like you're talking to someone rather than a robot like in prototype II. Overall, we have been able to tune up and add detail to the simulation that position us better with our objectives and gives us a higher quality experience for the user.

Script Update

      After getting feedback from our edited script, we changed it to a more concise script that focuses more on the main points we're trying to get across and also cutting down the length to make sure the VR experience doesn't take too long during design day.

User walks up to window from before the position of the broken wall (says shouldn't be around here)
PI: Who are you?
User: I was just walking home. Are you a detective? What are you doing at a crime scene like this?
PI: Doesn't matter who I am, what happened here was messed up.
User: Did you know them?
PI: No I didn't.
User: Most people wouldn't get involved unless they were close to the victim.
PI - Most people are scared and ignorance is bliss. The public just doesn't understand.
User: Doesn't understand what?
PI - Not getting involved won't protect you from random attacks.
User - What do you mean, random? I thought only people who snoop around get targeted.
PI - Well look at this family. This window was completely shattered and the walls are riddled with bullet holes. If these robots are near perfect killing machines, why would they make such a mess?
User - Hmm… did you see the house just down the alley? It was recently damaged just like this.
PI - Nobody lives there, it's been abandoned for years.
User - Hmmm…
PI - You see where I'm getting at? The family living in this store was blatantly pro-government [picks up/show propaganda posters]. Do they seem like they would go out of their way to provoke them?
User - I see what you're saying, but why would the government allow weapons like this to randomly kill people?
PI - They care more about military interests than the safety of civilians. The arms race led the government to focus on quantity over quality. These "mistakes" happen often enough that the government struggles to cover all of them up.
User - So by investigating here you're hoping to– *[hears drones sounds/gunshots]
(or)User - If that's true what can– *[hears drones sounds/gunshots]

PI - Hey you better get going
User - …

Updated Test Plan

Test ID	Test Objective (Why)	Prototype Number	Description of Prototype used and of Basic Test Method (What)	Description of Results to be Recorded and how these results will be used (How)	Estimated Test duration and planned start date (When)
1	Evaluation of VR functionality	1	Test that all relevant controls and interactions function.	VR functionality has been fully implemented. Minor adjustments on player size must still be done.	March 4-6
2	Evaluation of VR Environment design	2	Gather feedback on the environment design from potential users.	Feedback was gathered from peers with overall positive results.	March 10-12
3	Evaluation of character implementation	2	Verify that the character models function as intended	Characters were fully implemented and overall positive feedback was gathered	March 11-17
4	Evaluate audio and dialogue implementation	3	Test that all audio and dialogue is implemented properly.	Not yet done	March 24-28
5	Story Evaluation	3	Gather feedback on the story once it is fully implemented.	The story has been completed and implemented in its entirety. Feedback was positive.	March 18-24
6	Evaluation of Audio systems.	N/A	Gather feedback on all audio systems	Not yet done	March 24-28
7	Evaluation of modified environmental design.	3	Gather feedback on modified environment design.	Modified VR environment is only partially completed. Feedback so far is positive.	March 21-28
8	Final Review	N/A	Gather final feedback for the finished project.	Not yet done	March 24-31

Project Task Plan

Task List	Estimated Task Duration	Who is responsible	Task Details
Finalize script	30 minutes	Jean	The final 2 or 3 lines of the script have not been finalized, before starting the voice acting we will have to finish the entire script.
Voice Acting	1 hour	Malcolm and Chris	Record the finalized script lines in a quiet place. Individually and/or together and have the audio file ready to import to Unity.
Poster Board Creation for Design Day	1 hour	Everyone	Members have to buy, design and finish the poster board before design day which will have pictures, text and information about our project in a different format.
Game Menu	30 minutes	Jean and Sebastian	While entering the game we should have a start menu and something that makes the transition into the VR environment seamless.
Create digital posters to be implemented as props for the VR environment	1 hour	Brian and Sebastian	In order to enhance the VR environment we have to create propaganda posters, warning symbols and any visual pieces that can express our themes.
Ambience Audio	1 hour	Sebastian	We have to implement the sounds of the robots/drones. Include footsteps and other

			ambience sounds that contribute to the VR environment and/or the final video.
Finalize the VR environment	2 hours	Sebastian, Brian, Jean	Input the posters, other unity assets that express the human struggle against the robots such as nets. Have the voice acting and the ambience fully finished, have the game menu implemented and have the game polished.
Record the final video	2 hours	All of us	Using the voice acting audio, and the VR environment we combine everything into a more cinematic view to create a video that satisfies our client's requirements.

Conclusion

In conclusion, this deliverable has provided a comprehensive overview of our past prototypes, test plans and future project plans. It has highlighted the changes made in response to the feedback received from peers and clients, and how these changes have improved the quality of our VR experience. Our testing has proven successful in most areas, although some aspects still require attention, especially in regard to the VR environment design and audio implementation. Our bill of materials and target specifications have not changed. Our future plans are clearly outlined with realistic and achievable tasks. We believe these tasks will further enhance user experience. As we move forward towards the next phase of the project, we will continuously improve our prototype based on feedback and testing results.