Just A Girl

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Approximately one in three women, and one in six men have experienced being stalked at some point in their lives. Just A Girl is a VR project for the CAVE2[™] Virtual Environment that embodies the uncomfortable and unsettling obstacles women face when being stalked. This project's objective is to spread awareness by proposing community and self-defense as possible solutions. The project immerses the player through sound and interactions, plunging the player into the harsh reality.

1 INTRODUCTION

Stalking involves a repetitious pattern of unwanted conduct that includes harassing or threatening behavior, committed by one person to another. According to the National Institute of Justice Centers for Disease Control and Prevention (NIJCDC), women are significantly more likely to be stalked than men [1]. In fact female stalking victims often report being followed or watched on their way home or to work. Also women who have experienced stalking on multiple occasions have reported numerous serial forms of violence and harassment everyday [2]. According to a study done by the NVAW less than half of female stalking victims have reported being directly threatened by their stalkers [3]. Stalking is not primarily a sexual motivation but rather a psychological hostility towards the victim that often stems from rejection. The perpetuated behavior of a stalker includes anger, resentment, and obsessiveness.

Our project focuses on female stalking victims due to them having a higher likelihood of being targeted than males. Additionally our project also focuses primarily on the perpetuated harassing behavior of a stalker. Our stalker in this case is represented through a male voice due to males being more likely to participate in the act of stalking. Although our focus lies on behavior of female victims and the perpetrators, we also prioritize the importance of community and self defense. We know that stalking may not be prevented but through our own research and personal experiences we believe that these solutions are the best way to protect the victims.

2 The Concept

As stated before, most stalking cases involve female victims; while men can also be victims of this the likelihood of being targeted is higher for women. According to the NJCDC, though stalking is a gender neutral crime the main victims of stalking are women and the primary perpetrators are men; with about 8.2 million women having been

stalked at some point in her lifetime [1]. Our solution to this problem is not to solve stalking all together but to find ways of protecting women who are victims of stalking. Our project allows for anyone (of any gender) to play as the main victim allowing for them to experience and understand their role in preventing the issue. We value the importance of community and how it can help women in those situations. As a player they will be able to recognize the signs of someone being stalked while also playing a role as a member of the community helping the main character in the end. This will also allow for female players to understand the importance of self-defense. Though there is still no exact solution for preventing stalking, we believe that by getting others to be involved and act as a sense of support we can help prevent or lessen the likelihood of violence against female victims.

3 Research

When beginning this project our first priority was to find ways we could improve gender equality. We went through different scenarios that women face eventually leading upon harassment and stalking. Due to us never seeing a project with this topic we chose to focus on it and began reserching. Although the topic may seem broad or heavily covered, there was still a lack of information on solutions to the problem. So we began researching further into how stalking can be prevented. After finding a video called **10** *Hours Walking In New York As A Woman* it was of course what we predicted;stalking or harassment itself can not be prevented but there is a way it can possibly be avoided or stopped. We found through other videos of women being harassed that the perpetrator is more likely to leave the victim alone if someone else steps in or the victim themselves steps up. We also understand that self-defense may not be the right answer, depending on the moment in the situation; but we found that when a woman steps up for herself in front of others, there is a likelihood that the perpetrator will leave her alone. Through the research that we found we used them as inspiration to create an unsettling and uncomfortable environment; creating a realistic behavior of a predator.

4 Development

At the beginning of our project, we started our development process with the first city scene. We programmed the stalker AI to follow the player, and wrote a billboarding script that would face 2d objects towards the player at all times. This would allow 2d designs to be added to the scene that are more abstract and unique to what we could make in a 3d design software. After the first city scene, we developed our grocery store scene next. With this scene, we developed the shopping cart feature, where you are able to pick up different items and put them inside the shopping cart, which will then pop up text that will describe a certain fact about how stalking/harassment affects women. Finally, we developed the final city scene, where the player gets overwhelmed by all the text surrounding them, and has to use unique approaches and the help of bystanders to avoid the stalker. Here, we used similar scripts from the previous city scene, but then wrote a new script to control the flow of the final city scene, so rather than having the player walk to an area, they would just free roam the world until the simulation ends.

5 Storyboard

When designing our storyboard we were inspired by our research and the stories of women who have been stalked and sexually harassed. We were especially inspired by the infamous YouTube video **10** Hours Walking In New York As A Woman. For the storyboard and the simulation, we wanted to recreate that video but in our own way (Figure 1). The font and the stick figures seen in the storyboard are the same typeface and figures that we used in

our actual simulation. As seen in the storyboard the simulation starts off with the player walking to the grocery store and being bombarded with facts about sexual assault and stalking. This varies a bit from what the final simulation looks like because we also added things that a creep would say to the player. The grocery store scene also looks a bit different because we decided that the facts about sexual harassment and stalking would be better perceived if it was shown on the wall rather than on the floor where the player would have to look down to see it. For the confrontation scene with the creep, we wanted it to be a jumpscare so that the player would get the same anxious and terrified feeling that victims feel when they are approached by a creep. Our solution scene on our storyboard was originally going to be on bystander who comes and scares the creep off but in the end, we thought it would be better if a group of bystanders came to show how as a community we have to work to stop sexual harassment when we see it instead of ignoring it. For our ending scene, we wanted to remind people of the daunting facts about sexual harassment and how they can help stop it by speaking up.



Figure 1: Initial Storyboard created by Ryan Carter in Adobe Illustrator

6 Interactions

With interactions, our first interaction was with the ability to grab text that popped in front of the player and move it away from the player's view (Figure 2). This introduced the idea of creepy text overwhelming the player that also played a creepy sound towards the player from the stalker. Then, we added the collision with the grocery store's front door, which will teleport the player inside the grocery store. This allowed a seamless transition to the next scene. Inside the grocery store, we had the interaction of dragging and dropping each of the food items into the shopping cart, which then popped up a text that showed a fact about stalking/harassment towards women. The next interaction would contain the user walking towards the cashier, and then invoke the checking out scene, where the cashier takes all the items from your shopping cart and processes them. Once done, you head to the final scene. Here, you have the same interactions as the first scene, but the text will overwhelm you further. You will also see white text of things you can say back to the stalker and throw that at the creepy text to help remove it faster.

6.1 Testing Interactions

During our testing of interactions, most of our interactions worked the first time except for our grabbing and throwing of text interaction. When the text spawned, it would only appear on some screens but not others, creating a very weird looking effect. We realized that using Random() inside of unity was causing issues for the cave2, but that was how we had the text spawn in a random location every time. So instead, we used our own custom built random function, that would be the same spot each run, but still technically random at the first run. This fixed that issue, and we were able to solve our interactions.



Figure 2: Testing Interactions and Scenes.

7 Scenes

The first scene was the first city scene (Figure 3). This had the purpose of introducing the player to the stalker, and getting them accustomed to grabbing text and moving it away. They would walk forwards towards the entrance of the grocery store, and eventually have the stalker follow them from behind, throwing creepy text at them.



Figure 3: Asvin Ragunathan Navigating Beginning City Scene

The second scene was the grocery store scene. Here, the player would grab food-shaped text and place them in their grocery cart. When it is placed inside the grocery cart, a text would appear in front of them describing a certain fact about what they picked up. This would be a fact about how stalking/harassment affects women. They would then be able to walk in front of a cashier to get their items checked out.



Figure 4: Jabril Hull Navigating Grocery Store Scene

The third scene was the final city scene (Figure 5). This had the purpose of now throwing a lot of text at the player for them to remove. It also had a jump scare pop up when the stalker would get too close, and have white text appear to help the player remove the red text, as it will eventually get too much to remove all at once. Eventually bystanders will come and help you, and remove the text for you. To conclude the story at the end of the final city scene there is a message to the player stating, "If you see something, say something."



Figure 5: Asvin Ragunathan Navigating Harassment Scene

8 Typography & 3D models

For typography, we wanted to use a sans serif font that wasn't too flashy and could be used to display our facts and we wanted another font that looked creepy like the words that the creep would be hurling at the player. For the facts about stalking and sexual harassment, we used the font Articulat by Connery Fagen. This font is a basic sans serif but it's not so basic that it's boring to look at like some san serifs. For the font that we used for the creep's dialogue, we used the font Folk Rough OT by Maurizio Osti, Jane Patterson, and Ben Shahn. The typeface Folk Rough OT is visually grating and harsh like the words that the player is bombarded with on the screen. The typeface also has a horror element to it that works well with the jumpscare scene that we have near the end of the simulation (Figure 6).



Figure 6: Initial Creep Design created by Ryan Carter in Adobe Illustrator & Background type by Jabril Hull in Adobe Illustrator

The setting of our simulation comes from a code taken out of a late 90s video game that featured Chicago's Chinatown. Seeing that we all go to the University of Illinois in Chicago we thought it would be fun to make the setting the city we already live in. For the creep and the bystander, we took inspiration from our storyboard and made them all regular stick figures with heads made out of words to describe who they are (Figure 7). We chose to do a simple design for the people because this project was supposed to be mainly type and we didn't want to draw too much attention from the type.



Figure 7: Initial Bystander Design created by Ryan Carter in Adobe Illustrator

In the scene of walking to the grocery store, the player can see 3D models of cars made with the words "You're So Hot", this 3D model is intended to replicate the drive-by nature that some sexual harassment feels like. For the grocery store scene, we used 3D models of food that were made out of facts about stalking and its effects on victims (Figure 8). The font Articulat was used to make the 3D food, characters, cars, etc. The words that the creep bombards the scene with aren't in 3D but that's only because a 3D model wouldn't pollute the screen how we wanted.



Figure 8: Initial Object Design created by Ryan Carter & Jabril Hull in Adobe Illustrator

9 Conclusion

While our solution may seem challenging we understand that stalking is not easy to solve. But we hope that players who have the opportunity to partake in the experience take away the importance of standing up for others, and understanding the importance of self-defense. And remember, "If you see something, say something."

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