

# UNSOLVED

## Hinterkaifeck

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# Playtesting

Now that the bigger part of developing our game is complete and we have a finished version, we had to make sure we made all the correct decisions along the way. Make sure that game is complete,playable and above all... FUN! We had to playtest our game with people that have zero experience with it.

What we did :

- Design a test
- Find a variety of players (different ages/genders)
- Perform the test
- Get feedback from an evaluation form
- Get feedback from a short interview
- Evaluate feedback
- Make necessary changes to the game



# Designing the Test

We split the playtesting in 3 parts:

- Playing the Game
- Completing an evaluation form
- Doing a short informal interview

As subjects we chose family & friends from all ages. Since this game is not really meant to be sold we thought that choosing a vast variety of testers would allow us to find more bugs and also get some interesting suggestions on how we can improve our game.

# Performing the Test

The first thing we did after one of the testers arrived was to showcase the hardware: explain them all the different parts (sensors, controllers, headset) and how they worked. We also gave them a brief summary of what they would be playing and then gave them a small warning regarding the size and furniture of the room so that they would be more aware of their movements.

During the playtest :

- We encouraged the players to vocalize their thoughts
- Took notes of what excited them and what made them struggle
- Made sure they did not hurt themselves
- Only interfered when they reached fatal bug (Proud to say only happened once)
- Poked them with a stick as haptic feedback



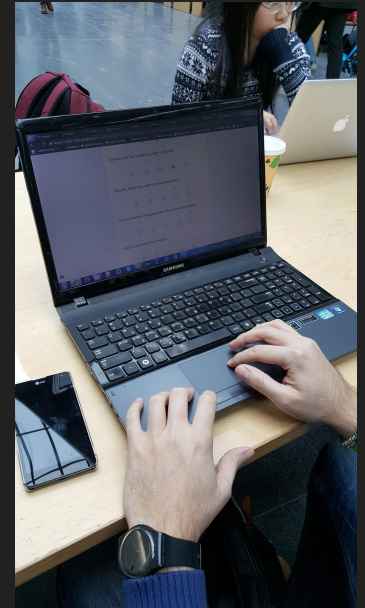
# Evaluation form

After the players completed their session with the Vive, we provided them with an evaluation form so that we could quickly get some essential feedback while their experience was fresh.

The evaluation form had 4 categories:

- Virtual reality experience
- Realism of the environment
- Interaction with the environment
- Gameplay

Each category had 3-4 questions which could be answered with a 5 step evaluation scale from very bad to very good. This would later help us find if we succeeded in reaching our initial goals.



How comfortable did you find the controls

1 2 3 4 5

How comfortable was the VR experience

1 2 3 4 5

Did you find the travelling system sufficient

1 2 3 4 5

Was the interaction with the environment easy

1 2 3 4 5

Did you find the interaction with the environment realistic

1 2 3 4 5

Did the environment feel realistic

1 2 3 4 5

Did you find the tutorial helpful

1 2 3 4 5

Did you enjoy the puzzles

1 2 3 4 5

How hard did you find the puzzles

1 2 3 4 5

How well do you believe you understood the story

1 2 3 4 5

Did you find the storyline intriguing

1 2 3 4 5

Rate the overall gameplay experience

1 2 3 4 5

# Informal interview

To thank our players for helping us we usually either treated them with some food or took them out for a cup of coffee. During that we start a conversation on the game where we would openly talk about:

- What they really enjoyed about the game
- What they struggled with
- Got deeper answers on some questions from the evaluation form (Storyline for example)
- Suggestions on how we could improve the game



# General Feedback

We knew from the start that because all our testers were either family or friends we would get “kinder” comments on our game despite the fact that we asked them to be objective. So in order for that not to happen we pointed out on purpose some parts we didn’t like about our game so that they could follow those up with their own.

In general we were very happy with the results and got a big confidence boost. The users :

- After finishing the tutorial had no problems interacting with the environment
- Seemed to really enjoy just exploring our game trying to see every part of it
- Found most of the riddles to be interesting and hard
- Understood the storyline and wanted to see how the game ends



# Evaluation form feedback

- Virtual reality experience
  - ❑ Players were blown away by Vive's accuracy and resolution
  - ❑ Experienced no dizziness or other negative effects they had heard of
  - ❑ In only one part of the game the framerate dropped because of realtime light rendering, but this already got fixed.

In general we felt like Vive was doing half of the work for us.. Players could not get enough of it and seemed like they would not have a problem if there was no actual purpose at all.. Running around and smashing stuff seemed to be enough.

# Evaluation form feedback

- Environment realism
  - ❑ Really impressive feedback from the office scene.
  - ❑ While playing the tutorial users commented that it looked exactly like what they would imagine an old police office to look like.
  - ❑ Hinterkaifeck farm fitted the general feeling of the game perfectly.
  - ❑ Background music enhanced the experience.
  - ❑ Some rooms in the house were not detailed as the office which some players noticed.
  - ❑ Some objects felt disproportionate when held.

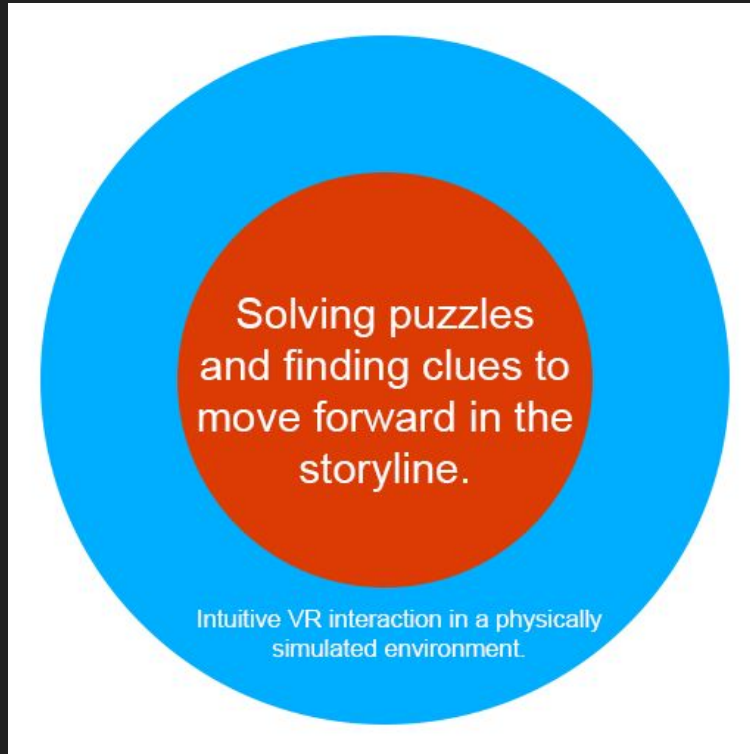
# Evaluation form feedback

- Interaction with the environment
  - ❑ Tutorial was really helpful for understanding interaction and navigation
  - ❑ Teleporting traveling method proved to be the correct choice
  - ❑ Players got really excited about the shooting system
  - ❑ Users didn't have a problem understanding how to use items in order to solve riddles
  - ❑ Only drawback was that all users found a way to "cheat" the game by extending their hands and teleporting through walls. This allowed them to enter locked rooms.

# Evaluation form feedback

- Gameplay
  - ❑ Not all players finished the game basically because depending on the player and their style of solving riddles, it can take quite long to reach the end.
  - ❑ Everyone enjoyed the riddles with some small comments regarding the difficulty.
  - ❑ Hint mechanism was effective in terms of keeping the gameplay flow alive.
  - ❑ Positive feedback on the ending scene (in spite of the cheap animation and voice acting)

# The Big Idea (Bullseye)



# Suggestions

During the interview we asked our testers if they had any suggestions on improving the game. Since we asked them to be objective we knew there would be some concerns regarding the voice acting and animation that we could not really do much about, but these are some of the ideas:

- Make marks on the walls when they get hit by a bullet
- Not allow the models of the hands to go through walls or other concrete objects
- Improve animations
- Hire a voice actor to improve narration
- Add more models in some specific rooms inside the house
- Make the curtains dynamic
- Reduce the size of the barrels inside the barn



# Changes

After gathering and assessing all the feedback we got, we sat down and discussed which modifications would make it into the game.

- We added more details to the police chief and final enemy animations
- Added more models to the parents bedroom
- Added more models to the storehouse
- Improved the writings on the notebook pages in order to make the storytelling more complete
- Added a system where black marks would appear on walls if they were hit by a bullet
- Added a system where locked rooms would have an event collider which can only get triggered by the player. If that happened the user would be teleported outside the room. If the room got unlocked then the script would get disabled.
- For the sake of realism we dynamically connected every object to the user's hand. This means that if enough force was applied to the holding object from an outside source, then it could be knocked away. When the user teleported though, this would cause the object to fall down. We had to make a trade off between realism and usability in order to improve the gameplay. Now every object is directly attached to the user's hand.

# Conclusion

This part of the development cycle proved itself from the very beginning to be also the most important one. Having some experience in game development we have been lucky enough to have playtested a number of the game features among friends in the past. Because of this we were confident that we were moving towards the right direction and now that we almost reached the end we will only have to do minor adjustments instead of a 180 degree turn.

We consider our playtesting experience a success, since we found out problems we might never had encountered by ourselves and decided on changes that will definitely improve the player's experience.

Despite all the little things though, this phase of development proved to be quite the confidence boost for us. All our users seemed to enjoy the game from start to end and goals like clever puzzles, realistic interaction with the environment and an immersive gameplay seemed achieved. The next step is to make those final adjustments , review our experience and prepare ourselves to overcome this project and improve on next semester's.



Questions

Ask 'em !