

# Computer Games Laboratory

WS 2016-17

## Conclusion Report



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## Introduction

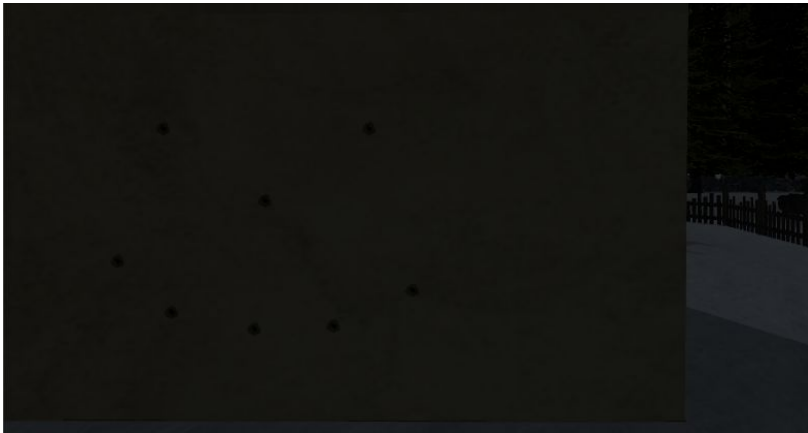
Our game is finally finished!

Creating Unsolved:Hinterkaifeck has definitely been an amazing and very rewarding experience, we would not be exaggerating if we said it was one of the most important this program has to offer. In this final report we will quickly go through some final changes that were made after playtesting the game and then we will take a look at how we got here. We will give you an insight to our journey and share with you the obstacles we overcame, the lessons we learned and most importantly our thoughts on the project and the praktikum in general.

## Minor modifications

As we mentioned last week, after gathering and examining the feedback we got from our testers we decided on some last minute changes in order to improve the game. We will list them below.

**Added decals when bullets hit walls.**



**Added more objects to certain rooms.**



Rescaled some objects in the barn.



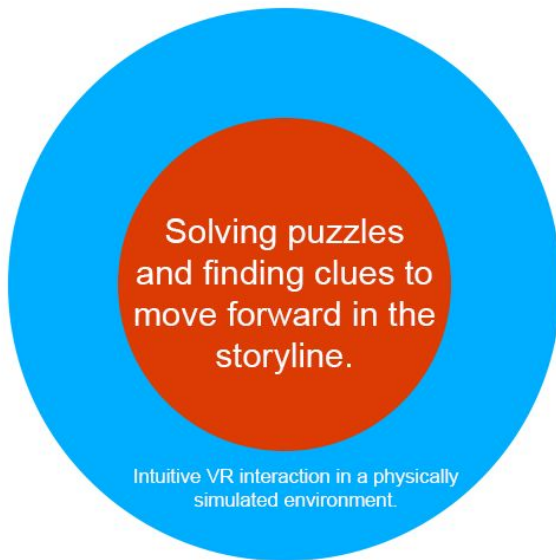
Removed the chief from the office scene.



## Was our project a success?

We all consider our project a success, a big one actually. Not only because we managed to achieve the two big goals we had set out in the beginning of the semester but mainly because we failed a lot. We deleted countless hours of work simply because our mindset changed during development. Falling down and getting up again gave us the most important lessons. We saw how things that had nothing to do with our “expertise” could very easily destroy other things we worked hard for. We learned to not hold onto things too tight and put the playing experience above all. We all became better developers and are ready to overcome **Unsolved:Hinterkaifeck** in our next project.

Let us remind you of our “big idea”.



### **Goals :**

As we said above we achieved what we set out to do in the beginning. A Virtual reality game where the player could take the role of an investigator, dive deep into the story and engage into puzzle solving inside an immersive and realistic environment.

One of the very first advices we were given was think small. We knew why , but being so excited to finally materialize all the things we learned in the past year we couldn't help ourselves with designing small but dreaming big and as development went on we slowly tried to add more and more content. Some of those “extras” made it into the final version and some did not. As a result even though we achieved everything we told you we wanted, there were a lot of small disappointments along the way. (Cinematics,side quests.. etc)

### **Development cycles:**

Despite all the drawbacks we had when trying to overcome ourselves and add extra content to the game we can safely say that we had a smooth journey. Not that it wasn't a hard one, it was just that because we were obliged to plan out the whole semester in the beginning and we truly spent a lot of time doing so , we never found ourselves lost during development. We always knew what we did correctly, who had to do what and most importantly we understood what had to be done next. Of course we changed our minds regarding a number of things either because we decided they did not fit the game either because our testers indicated that. Below you can see a picture of our tasks, what was planned out in the beginning and what was accomplished in the end.

	Your Low Target	Your Desired Target	Your High Target	Your Extras
Functional Minimum	Your Low Target	Your Desired Target	Your High Target	Your Extras
Interaction	Interaction	Interaction	Interaction	Interaction
Grab And Throw	Combine tools	Use as weapons	Use object - all items	
Use object - item specific (Only what is in the bag + hide specific)	Use object - more items	Use object - more items		
		Exchange items from one hand to the other		
Navigation	Navigation	Navigation	Navigation	Navigation
Use Taking	Use Controller navigation		Use Proton	
	Teleportation			
Environment	Environment	Environment	Environment	Environment
Office		Barn	LightHouse	Island
Special Effects	Mouse 7 rooms	Car		
Dialogue/Notebook	Special Effects	Special Effects	Special Effects	Special Effects
	Dialogue/Notebook	Events	Weather Effects	Fire
		Dialogue/Notebook	Dialogue/Notebook	Water
		Detective mode		
Audio	Audio	Audio	Audio	Audio
	Sounds of items		Background music	Voice Acting
Puzzles	Puzzles	Puzzles	Puzzles	Puzzles
Single Layer	Double Layer	Triple layer		
Animation	Animation	Animation	Animation	Animation
Items	Items		Decoration items	Object specific animations
Fighting Mechanism	Fighting Mechanism	Fighting Mechanism	Fighting Mechanism	Fighting Mechanism
		Punches	Guns and health system	
Modeling	Modeling	Modeling	Modeling	Modeling
Hidden only - Case file, bag, bag items	Decoration Chief	Extra Decoration	Extra Decoration	

### Project structure :

This was not obvious for us in the beginning(how can i know from now what has to be done for the whole semester), but the project structure is almost perfect. It gives all the teams a backbone for development which guides you through the process of making a real game and makes your decision making much earlier. There are though two changes we can suggest, based on the idea that “No matter how complicated and ground breaking the technology, no matter how many hours have been put into making a game look good.. unless the game is enjoyable it was all for nothing”.

### Suggestion 1:

We believe the prototype phase has to change a little bit, especially the part where you have to create a cardboard version of your game in order to test if it will be fun later on. This might work on some game ideas but on others it might actually harm development instead of improving it. Think for example the redline project who has the element of fear at it's core or the surfing one. Their prototype had absolutely nothing to do with the final gameplay and the teams already knew that before even making it. We felt like in some projects teams were trying to create a prototype just for show while knowing already that the path they would follow would be different.

It might would have been better if teams were allowed to create a digital prototype and then blend what they made with our second suggestion.

### Suggestion 2:

More playtesting !! We saw that most of the teams did not have a functioning gameplay even after the alpha release. Enforcing playtesting (not a formal version, just a couple friends trying out the game) in more parts of development would pressure the developers of actually creating something playable much earlier. This would also result in much smaller changes towards the end and much better games in terms of gameplay. It would allow teams to figure out what is really important in their project much earlier and shift their attention accordingly.

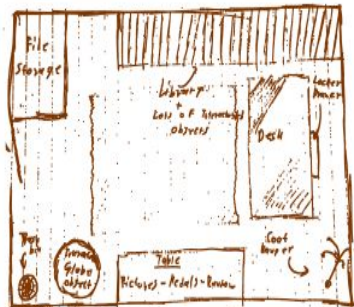
## Our Experience

### Lessons learned :

As mentioned before this project will be probably one of the most important experiences in our Masters. We became better developers because we

- Learned how to develop around the Vive
- Learned new solutions to common issues when it comes to game developing
- Learned how different your thought process should be when dealing with VR, especially when controllers are involved
- Learned more about other specialities like environment modelling & game design

But the biggest lesson was the whole experience in general, how you can constantly fail, learn from your mistake and improve on the next iteration. How the smallest things can grant your strongest technical achievements useless and above all that the thought “Good enough” simply does not belong in this industry. Unless you are sure you can create something that will come to be perfect then you should either find a way around it or just not include it all. A very strong example is our police chief



In the beginning he was just standing there moving his hands, which was horrible. Then we decided we would make him only appear towards the end of his speech and put more effort in animating him. So we did, the animation was improved but still, with the character being human and our lack of animating skills the result was still “imperfect”. Playtesters noticed that and this distracted them from the general purpose of the scene. It also raised questions regarding where he was before since he was giving commands through a speaker . The character in general was causing more problems than actual contributions to the game because we didn't *think small* and brought something to the game we thought was *good enough*. So our end decision was to remove him even if we spent a lot of time and effort on him.

**Technical difficulties :**

We decided early on that we would focus on the technical part of the game in the very beginning. We would make a robust system that will be able to support all our future implementations and from then on we could only focus on the more creative part of developing. Of course things went on a much different path along the way. We kept implementing and introducing new additions to the game by taking shortcuts, by this we mean specific scripts for specific uses. We quickly realised this was causing an even bigger number of problems so we returned to our original system and tried to refine it.

**The theme :**

In the beginning we thought the theme was very strange, by this we mean very vague. Shortly after we realised how this benefited us, in the sense that we could basically implement any idea we had by just adjusting it a little bit to the theme. Were we correct though?

If this is the case then we believe that it would be better not have any theme at all, complete freedom on the project idea. If the main purpose of the theme is to practise, learn how a game is made from start to end and improve our skill set in general a theme only hinders the final result. Some may believe that this actually help us when generating a game idea but we are sure that lack of ideas are surely not a problem.

If the main purpose of the praktikum though is to give us an idea of how a game is made and what kind of conditions we will meet when we go after a job in this field then yes we believe a theme is necessary . Since it is quite obvious that especially in the beginning you will find yourself implementing other people's ideas.

For us though we had some trouble in the beginning implementing our pre decided game idea into the Munich theme but by the moment we found out about the Hinterkaifeck case it all just fell into place.

**Next Project :**

We learned a lot this semester and we already have some ideas and restrictions for our next project in the following semester.

- Virtual Reality was a unique experience but not again. In order to truly create something amazing and for all the members to improve together it is necessary that all team members own the vr hardware or at least the majority. The high cost of the Vive or the Oculus though grant this impossible. The way we did was that we had very frequent meeting at Chris's place where we went through code and how to improve it but this is very bad way to do it.

- Keep your project idea restricted. By this we do not mean to not have big ideas around it, but make sure that aspects of game development that you are not familiar with either play a minimal role in the final result or not included at all. For example the fact that we went for a story driven game cost us a lot of work(which also looked nothing like what he anticipated) that could possibly be invested in other aspects of the game. Next time we will create something which will be based on a core mechanic, not story based and which as little human elements as possible, since those are that stand out if not done correctly.

## Conclusion

Looking back we are very happy that we chose this praktikum. The project structure taught us a lot and our failures allowed us to improve as developers. No doubt we consider our game a success and we are more than proud about what we created, but as always we believe we could have done better. We are wiser now, we know how to shift our attention during development and manage our time in a more productive way. We are looking forward to the next semester where we definitely plan to outdo ourselves..

