A DRONE IN THE DARK

Conclusion Chapter

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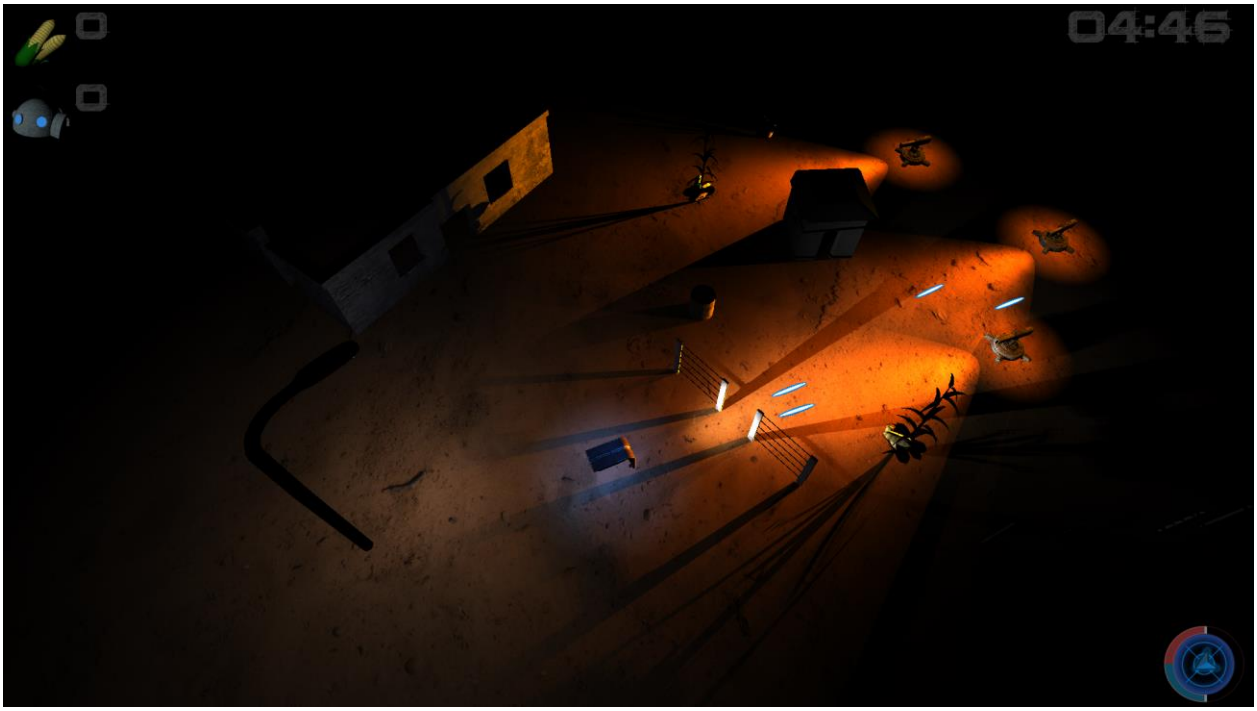
Inhalt

1. Summary

1.1 Final Game



After another week of intensively working on the project we ended up with a fully working game. We managed to implemented all the goals we scheduled including the high target. In addition to the original set of tasks, we even managed to add a map editor which provides the players with the possibility to create their own maps as well as simplifies debugging and testing crucially.

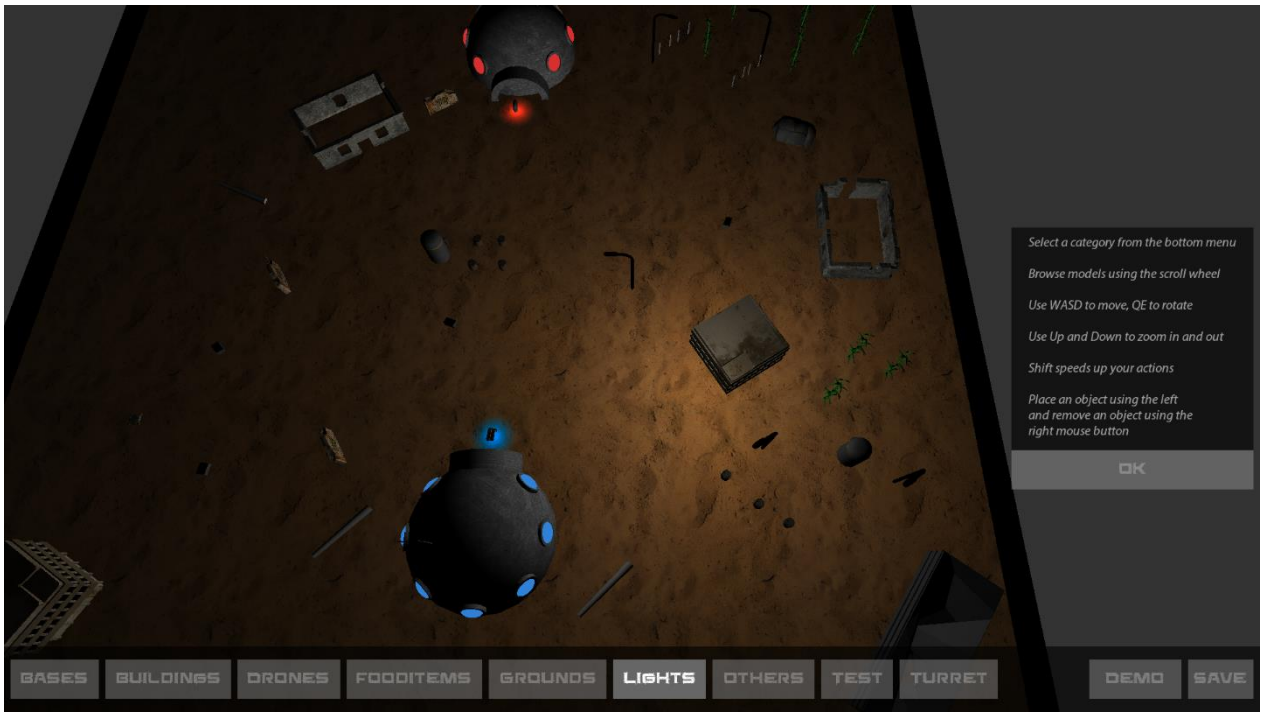


Figure 1: Map Editor

1.2 Changes since the Alpha Release

Since the alpha release a number of changes were made. Firstly, we tried to adjust our game according to the feedback of our play-testers. We decided to come up with a stamina system instead of using the collected food items as energy-source for the temporary power ups. This was the most fundamental change with respect to our initial proposal. Another play-testing session revealed that the new system is more fun.

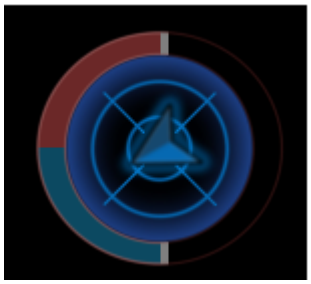


Figure 1: Compass, Health- and Stamina-Bar

Moreover, we added a compass to the HUD which always points into the direction of the home base. This should help the player orientating on the map.

Furthermore, now the player gets points when killing turrets or his enemy, which was also a recommendation given by some of the play-testers.

We created two soundtracks and added them to the game. Some of the buildings got new textures and we added some more assets.

Finally, the biggest change is the level-system which was integrated into the game.

It enables the drone to reach a new level after enough food was brought back to the base. The new level will come with one of the three randomly chosen upgrades. These upgrades are additional health, additional stamina and an increased fire rate. There are three levels per upgrade which means that after making it to level nine the drone will have all the upgrades.

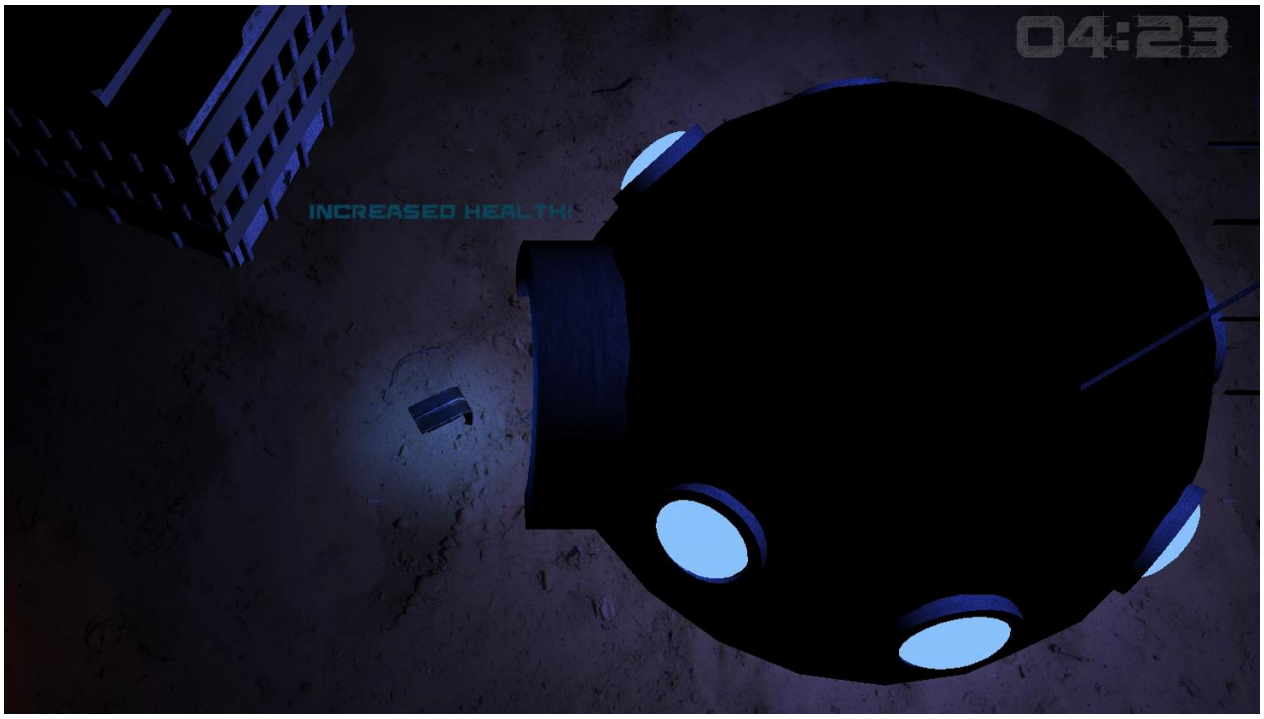


Figure 2: A toast message indicates that the drone just reached the next level and which upgrade it received.

2. Schedule and Progress During the Project

The entries marked in green are points which we managed to implement; for the red ones we unfortunately couldn't find time in the end.

Functional minimum:
Singleplayer game without fighting
Collect as much food as possible within given time period
Premade single map
Low target:
LAN
Lightsystem
Improved Design
Desirable target:
Advanced food collection: growing food, opening containers

Fighting system

Sound effects

Advanced GUI

High target:

Environment danger: i.e., turrets, mines

Level system: level up in the base (uses food), e.g.:
- First level: no weapons
- Second level: install weapons or increase speed
- Third level: stronger UV-lamp or shields

Note: Here we changed the upgrade types since this did not fit in our final game anymore.

Soundtrack / additional sound effects

Extras:

Enemy AI for singleplayer model

Random events (lightning)

Explorable houses
- Hiding system

Multiple rounds

Warning system

Overall, we are satisfied by the progress our project made over the whole course. But at some points we lost focus a bit and we did not follow our schedule. Luckily, we always realized this before it was already too late. Also, we spent a lot time into extending the content processor. Although in the end the content processor worked as we intended, due to the lack of time we did not really make use of the extension.

3. Conclusion & Questions

Questions

1. What was the biggest technical difficulty during the project?

One major problem was to get rid of some ugly shadow artefacts and make the lighting look good while keeping the game performant. Another difficulty was the bug fixing in the multiplayer part. Some of the bugs were just very hard to reproduce and even more so if you had to do it alone, because the other group members were busy completing other tasks. Also it was harder for us than expected to implement intuitive gamepad controls.

2. What was your impression of working with the theme? Do you think the theme enhanced your game, or would you have been happier with total freedom?

Benjamin: I personally think that the theme was too general to make the games people made more comparable. Thus it was not really necessary to have the theme and on the contrary it was even a bit counterproductive to force food into our project idea. I would have liked to have absolute freedom because you don't often get the chance to make a game. So if we finally have the chance, it would be nice to be able to create what we always wanted to do.

However, it would be a very good idea to just make the theme optional and more specific, so people who don't have a clear vision of their game already, could gain some inspiration.

Rastislav & Luca: We two think the staff of game lab is really fond of their theme centric approach. We also think that keeping a single theme across all projects allows to compare the diversity of ideas that people managed to generate for a single topic. It can point out some very obvious things that you missed when thinking about the theme of the course, or completely surprise you with what people are capable of coming up with – even if you thought there is nothing especially interesting that can be done about it. So we personally think theme centric approach is quite helpful.

4. What would you do differently in your next game project?

A bit more of forward thinking. Even though we always tried to write generic/reusable code we had to do some major refactoring sessions. That is not very motivating for the guy who has to do it. Also we would focus a bit more on implementing basic functionality as soon as possible and see how the game looks like before moving on with adding functions which are just needed for polishing the overall feel of the game.

5. What was your greatest success during the project?

We personally think that our graphics look quite nice for the short amount of time we could work on them. We also believe that we managed to implement a functioning multiplayer, and last but not least the game was fun to play in the end.

6. Are you happy with the final result of your project?

Yes, we are very happy, especially with the fact that the people who played our game liked it, which convinces us that not only we implement what we wrote in our proposal but that our actual game concept seems to be fun.

7. Do you consider the project a success?

Yes, all of us learned a lot and we are happy with our game.

8. To what extent did you meet your project plan and milestones (not at all, partly, mostly, always)?

We were a bit behind at the beginning but in the end we reached them all.

9. What improvements would you suggest for the course organization?

Benjamin: I personally would have liked more time to polish the game in the end when we can actually see how the game works as a video game. The paper prototype at the beginning of the project took too much time away from that. A concept that works in a video game might not work on paper and the other way

around. Therefore, for me the link between paper and a video game is not really given depending on the project.

Rastislav & Luca: The paper prototype kind of helped us pinpoint certain flaws in the way our game works, such as when we decided that we should implement collision damage to force players keep their lights on from time to time. I guess we would have arrived to that conclusion sooner or later, but perhaps we can think or paper prototype as a final stage of brainstorming.

Rastislav: Perhaps TA's should try to compare all the projects in their initial brainstorm state and help people restructure their plan and maybe move some sections from desirable target to high target so people would definitely meet the requirements they set for themselves.

10. Did you like Monogame?

There were some problems concerning the content pipeline. It is very limited and you have to extend it if you want to do more. But it was a good foundation to build upon even though it would be nice if there were some more tutorials for some of the Monogame-specific peculiarities.

Conclusion

Overall, we are very happy about the result and the things we learned during this course. It was a bit of a challenge to start working with people you never worked before in such a demanding project. But for us it turned out very well and we did not have many problems. Fortunately, the task distribution worked very well and everyone was quite happy with the tasks they had to do. This way we were very productive and we could always see some progress in our development. Even though we think this course is very demanding and especially time consuming it was a nice experience and always fun to see how the other groups progressed and to compare the results.

Acknowledgments

We would like to thank following people for their contribution into our game. Our sincerest gratitude to you.

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- Rajko Kisdobranski
- Andrea Bruera
- Christian Würsch

Narrator for the trailer:

- Caitlin Buckley