RogueGen

Andreas Leitner
Florian Buschek
Jean Paul Vieira Filho

Significant changes

- Added simple story texts to introduce players into the world. It consists of an intro, victory screen and animation, and death screen.
- Increased number of Bosses in the last battle.
- Added unique textures for all bosses to make them more recognizable and special.
- Added audio and visual feedback when completing quests and healing.
- Ambient music now changes when fighting bosses to a more intense tone.
- Game session can now be quit by holding "Q" on the keyboard for more than 2 seconds.
- Changed the Healing Staff's skills to a healing beam and a circle that stays at its place. Also removed the ability to accidentally heal enemies.
- Player characters now face their walking direction if no other input is received.
- Changed Health Bar color to green for player characters to make it easier for players to see their own health.
- A few balancing changes were also made.

Development Overview

In general, our initial design idea remained mostly the same. We wanted to create a game in which players would explore a world together, while fighting off hordes of enemies. That is what we achieved in the end. However, some features had to be downscaled to fit the development time and are described below.

MAP GENERATION

The procedural generation produces different maps each time a new game starts. The maps are fun to explore with friends, and in each session the players must again find the locations of the quests on their own.

However, it still lacks "personality" to it. From the original design, it is still missing the ability to create areas of interest for the players to explore, like castles, villages, lakes and caves.

QUESTS, CHALLENGES AND STORY

This is the point in which we had the most simplification. It was intended at the beginning to have different storylines in each session. We did implement a system that allows for modular storyline pieces, but unfortunately, we only had time to implement 2 pieces: a starting and an ending quest.

During our playtesting, we evaluated that these are enough for one or two play sessions. In the future, we plan to expand heavily in this area.

COMBAT AND AI:

We created a real-time combat system for this game. We have made our implementation of this system as modular and as easy to enhance with new content and features as possible.

Each character can equip up to two weapons, with up to two skills each. Skills cover a range of types, such as melee attacks, projectiles, beams, and so on. They can have various different effects, for example dealing damage, inflicting negative conditions, applying positive buffs, or pushing targets in a certain direction. Enemies are generated by equipping weapons to a base character. The AI is tied to the weapons and skills, so it is automatically determined by an enemies' equipment, and it can take into account a variety of attributes. Enemies leave their weapons behind when defeated, allowing players to use them and the skills they grant.

The designing and implementation process of this system took quite a bit longer than initially anticipated. While this resulted in a good core system, it also meant that there was less time for filling it with content, although we still managed to create an assortment of different weapons, skills, and effects, as well as enemies and their behavior.

During playtesting, we evaluated that the combat is fun to play and there is a good variety of weapons, skills and enemies for one or two playthroughs. In the future, we plan on expanding the arsenal of equipment, skills, and enemies.
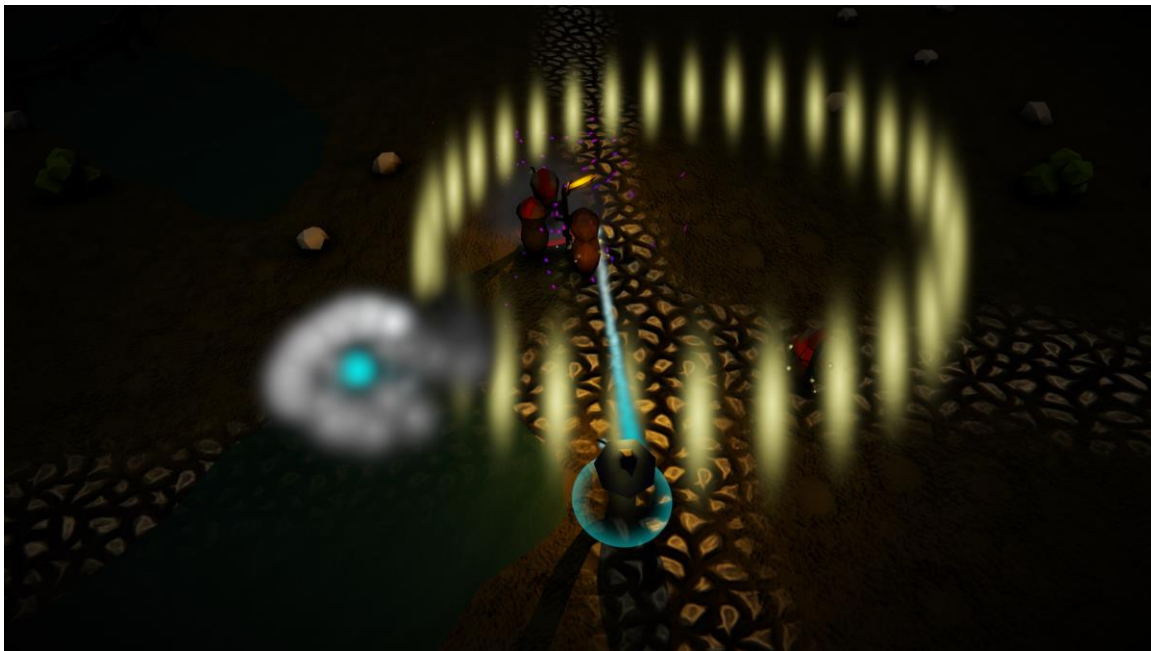
Personal Impressions

Jean:

The course met the exact expectations I had: create a game from scratch, going through the formalities of an industry-based development process. Most of the study time during this semester was dedicated to developing the game, to create something that I think all our project members are proud of.

In the end, I can say I am quite happy with the result. I learned a lot about procedural generation and its down and upsides. With so many open variables, it is far more challenging to implement simple tasks like playable area restriction, enemy spawning, story and player progression. But we did manage to deliver a game that is stable and fun to play.

The theme was ok and did not hinder our design phase. However, it would be nice to have total freedom to choose a theme on our own, since some themes may completely direct the game ideas to a specific technology. E.g. "Together" drove most of the games to be multiplayer, with many being networked.

With respect to the course organization, I would only suggest that the documents could be delivered at the presentation day. In our team, meeting was difficult due to all of us living far away from each other and having completely different schedules. Moreover, we usually finished implementing our features in the weekend and needed to meet one last time during the week to decide what we were going to put in each chapter. All other aspects I consider to be good.

In conclusion, the course contributed greatly to my experience as a game developer. It should be expanded to have more time dedicated to it and allow for more complex projects.

Andreas:

I was mostly able to follow our development schedule (partly due to the fact it was not strictly defined). The models, UV maps, and textures where finished to their respective deadlines. For the desired target "More Environment Models" I mostly added some objects we didn't thought of earlier, like: fence, stonewall, dead bush, and some extra weapons.

The other desired target "Character animation" was done by Florian despite the schedule, because it turned out that in our case it is easier to do the animations in unity than in blender. This also reduced some planning and communication because Florian knew what animation/ skills he wanted to add for all the different weapons.

Things I did that where not in the schedule because we didn't think of it at the beginning:

-Live preview in the main menu

-Configuring all the biomes and procedural generation settings (Jean did an amazing job by adding many configurable parameters)

-Configuring post processing and lighting

The high target of custom biome textures was met early because this way I was able to control the art style of all elements of our game. (so I basically have done every model and texture you can see in the game)

To the time estimates: Since I was missing some experience in UV mapping and texturing it took a bit longer than estimated to finish. The biome textures (with the normal maps) were also really challenging, because they must be tileable and without a recognizable repeating pattern. Now I could probably do most of it in less than halve of the time.

The way we distributed work into 3 parts (Procedural Generation, Art, Combat) worked well. This way each of us could focus on his own parts and we didn't need to meet that often to organize our goals and had basically no merge problems.

To answer some of the questions of the game document:

-"To what extend did you meet your project plan and milestones (not at all, partly, mostly, always)?" I think we mostly met our project plan and even did some of the high targets early. Jean probably had to spend a bit more time to reach his goals, because he had to do some parts of our 4. person. Overall, I am happy with what we could achieve in this brief time window.

-"What improvements would you suggest for the course organization?" I think it would improve the course if the topic is always as unspecific (meaning it allows different interpretations) as this semester. Some of the topics of the last semesters seem extremely limiting (Munich as an example). Overall, I liked how the course was organized, and especially enjoyed that the presentations were not very formal. This way the meetings were enjoyable as presenter and listener.

Overall, I really enjoyed this course and I am looking forward to doing it again next semester and improving and changing our current game. An important part I still have to say is that it was a great (learning) experience to efficiently work in a group for half a year.

Florian:

I really enjoyed the course and I am quite happy with the game we created. The ability to invest a significant amount of time into one game project, working on it as a team, and having a lot of freedom in what we want to create, was a great experience.

As my part of the development schedule was not particular detailed, I was able to follow it for the most part. I managed to include a part of the planned GUI, the floating health bars. Andreas made a little bit more for the GUI, such as the player character outlines and some other elements, but in the end, we did not have the time to implement a more complex GUI.

My main part however, was the creation of a combat system for the game. Overall, I think I achieved to create a fun system to engage with, that presents the players with multiple gameplay options and tactics. It is also extremely modular and easy to enhance with new features and content, if we continue the game in the next semester. A lot of my time in the beginning went into designing this system. Towards the end, I then did not have quite the amount of time that I would have wanted to actually fill it with content. Still, I think I created enough Weapons, Skills, as well as Enemies and their behavior to create a fun level. However, if we continue this game, we should add a lot more content.

I already implemented a relatively complex turn-based single player combat system before for another project, but I believe I learned a lot from the quite different challenges that a real-time multiplayer combat system presents, especially in regards to timing of abilities, movement in general, multi-character tactics/AI, and so on.

As Andreas already wrote above, I also made the animations for various reasons.

The way we split up the project was quite good in my opinion, as it allowed everyone to work on their own parts, reducing/removing possible wait times for others. It was also a quite nice moment when we finally put everything together.

I generally liked the theme for the game ("Together"), however part of the reason why I enjoyed it, is because it is so open to interpretation. In comparison, some of the themes from previous semester seem to be much more restricting than this one. Thus, I would prefer to have total freedom, especially if the option exists to continue a game in the next semester, as the two respective themes might contradict each other.

As a conclusion, not only did I really enjoy the course, but it also allowed me to gather a lot of (more practical) experience for game development.