

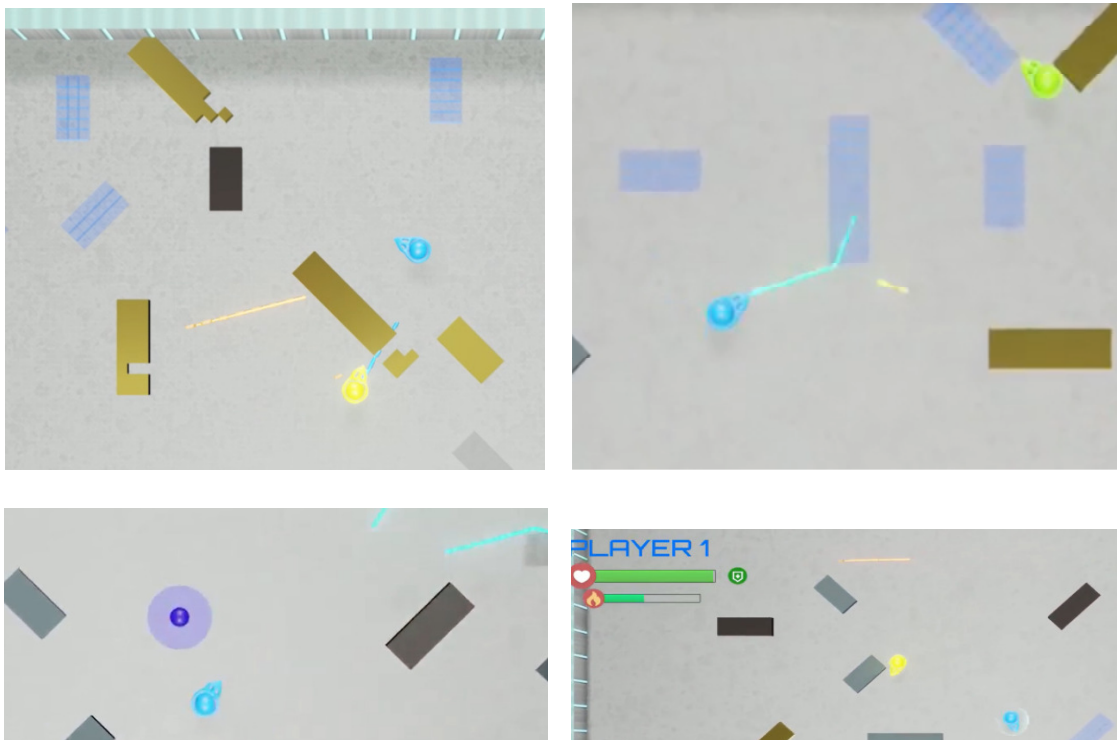
Conclusion Report



1. Summary

Our final game is a strategic, fast-paced top-down shooter, which incorporates the physics of light into the shot projectiles and destructible obstacles. The art style is kept fairly simple by visualizing only the important elements of the game, so the player keeps the overview, and the theme of the class – ‘Arcade’ – is fulfilled.

After the playtesting weeks, we fixed several bugs, included a counter before match start, added a high score board, changed the overhear function decrease to linear rather than step-wise, and gave support for fullscreen view.



2. Experience during class

Initial ideas -> game

Our initial game core idea has not changed during the development process. We wanted to create a fast-paced top-down shooter with strategic elements such as the reflection of light as projectiles and the destruction of objects, which is exactly what we did. However, some minor adjustments were made, especially in the destruction concepts. Rather than just splitting the obstacles in two pieces, if a separating line of voxels is destroyed, we now destroy the voxels immediately. Unfortunately, due to the matter of time, we did not add any movement of the obstacles by destructions, but they still could be included in the current concept.

All in all, the major concepts of our game idea worked out pretty well, and just minor modifications had to be done, many of them driven by balancing issues.

Development schedule

While we created our development schedule, we have set up a relaxed hour-scheme to prevent trying to squeeze in too many assignments in one week. This also has helped us to figure out the core mechanisms of our game and scheduling them in the first weeks of development.

During the project, it turned out that this strategy was quite effective. For some assignments we needed fewer hours than planned, e.g. the basic destructions, while other assignments turned out to be trickier, e.g. the local multiplayer network environment.

However, we did make several adjustments in the assignments itself, so we merged some assignments together, while splitting up other assignments in more sub-tasks. We also moved some of the tasks in different layers, since we figured out that we misinterpreted their importance.

Level of project structure: Contribution or Hindrance?

The project structure contributed to our work flow a lot, since we had fixed deadlines for delivering milestones. This kept us working on the game continuously, so that we had a constant progress in our game.

One of the most important aspects, which we consider plays a major role in how our game actually turned out to be, are the first two or three weeks of the project. We put a lot of effort into the brainstorming session, discussed almost up to 10 hours about possible game ideas. Even our final idea came up earlier, we needed this time of discussion and rethinking to realize that this was actually it, what our game should be. The following prototype assignment convinced us even more of our idea, so we started the programming phase with a promising feeling. Additionally, many questions, e.g. defining the core elements, were already set, which supported the programming work flow a lot.

Especially for the organizational aspect, the development schedule was a great support, because everyone could immediately see on which parts the other team members were working on. This enabled everyone to pick an appropriate next assignment in case the other work was already finished, or to address the right person in case of any issues, e.g. bugs or code structure questions.

Conclusion of class

The overall impression of the class is quite positive within our team. The theme 'Arcade' turned out to be more specific than we thought at first sight, but at the end those boundaries were also helpful to find an appropriate idea. Also, since everyone had the same major expectations of an arcade game, we did not have a lot of misunderstandings during the brainstorming process. Additionally, the theme supported us to develop a 'small' game, which suits for the time schedule of the class.

The biggest technical difficulties arose due to the fact that the workflow of C++-files within the Unreal Engine is not so well documented as the workflow with blueprints. Also, since some of us worked with the Engine for their first time, it took quite a bit to get familiar with the Engine specific classes and working environment. If we would now program a next game, we probably could realize some aspects in a more elegant way.

Since our game focused since the beginning on an exciting gameplay mechanism while keeping the amount of level design and art design aspects quite low, we could mainly work in our expert fields. This further led to the fact that we could meet all of our main milestones. Only the additional feature aspects, such as different game modes, e.g. a cooperative mode, is not realized, since it would include a whole new bunch of tasks which were simply not manageable during the given time frame. However, those additional features were clearly distinguishable from the core ideas, so it was pretty easy to cut them off from our project plan.

On the other hand, there are some improvement suggestions for the class we have. First of all, sometimes the expected deliveries for the milestones were not quite clear. One milestone e.g. required only optional slides, but in the class slides were actually expected due to the fact that out-of-class visitors were participating – this information was not given beforehand.

After that the delivery requirements were changed, stating that a presentation should be given, nothing mentioned about the slides. However, since then slides were actually mandatory, which was not stated clearly.

As a conclusion, the class was in our point of view a success, providing us at the end even with a great self-made game. However, some milestones deliveries could be stated more clearly.

3. Video

To highlight the major aspects of our game, we created a trailer-like video clip, which can be found here: <https://youtu.be/W9yLjXaKimE>