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OF LIGHT & SHADOW

OF LIGHT & SHADOW IS THE GAME DEBUT OF 12 ANGRY DEVS, DEVELOPED OVER 18 MONTHS BY A GROUP OF GAME DESIGN STUDENTS AT THE SALZBURG UNIVERSITY OF APPLIED SCIENCES. OL&S WEAVES PUZZLES INTO ITS PLATFORMING BY LETTING THE PLAYER SWITCH BETWEEN TWO CHARACTERS, ONE OF WHOM CAN ONLY EXIST IN LIGHT, AND ANOTHER WHO NEEDS TO LURK IN SHADOWS. WE CHECKED IN WITH 12 ANGRY DEVS (A MISNOMER ON SEVERAL FRONTS) TO CHAT ABOUT THE DEV PROCESS, WORKING WITH UNITY, AND MAKING GAMES IN AUSTRIA.

Alexandra Hall: How did the Of Light & Shadow project come to be? Were you all students?

12 Angry Devs: It started with eight MultiMediaArt students who wanted to create a game as part of their MA course. They started brainstorming, came up with the core mechanics, and pitched the project to the programmers at MultiMediaTechnology. Four of them jumped on board—and thus we were “12 Angry Devs.”

We started building a prototype in March 2011, and after that iterated regularly on the results. In January 2012 we had our first finished level, and in June we released the game with seven levels. Recently, we’ve added more difficult versions of these levels to the game—and we’re currently considering the possibility to apply for Steam Greenlight, using the resulting “deluxe version” of the game.

AH: Did you like working with Unity?

12AD: The Unity engine offers a lot of functionality out of the box. That’s something really useful if you care more about developing a game than

developing a game engine. Unity is also an engine that can actually be used by nonprogrammers as well (to a certain extent, anyway). The editor works in a similar fashion to 3D animation packages, so our artists were able to integrate assets and build levels quite easily. This of course helped us a lot with our workflow, because the programmers could focus on actual programming instead of integrating assets or tweaking values.

A downside of Unity (and its ease of use) is that if the engine doesn’t support a certain feature (like a specific rendering technique, for example), you have little chance of implementing it into the engine. We had this problem early on when we wanted to render some dynamic volumetric lighting. But eventually we managed to work around these limitations by using some shader trickery.

These issues aside, we felt that Unity was pretty much the way to go within a setting such as ours; you just have to be aware of its limitations in advance.

AH: How’d you come up with the light/dark game mechanic?

12AD: As with other teams we know of, light and consequently shadows are amongst a set of core mechanics and gameplay ideas that are obviously quite popular. That being said, we think we didn’t take an all-too-obvious approach to that particular concept and iterated several times on the idea of platforming combined with lights and shadows. Originally, Mr. Light and Dr. Shadow would have been two separate characters with unique abilities and played in turns, so you can see we’re quite far off with the final gameplay now. Early in development we started to build a playable prototype and constantly kept playing around with the mechanics, filtering out the fun parts of play, and cutting everything that wasn’t fun in our point of view.

AH: Did you run into any particularly tricky problems during the development process?

12AD: The visualization of the light cones was one issue that kept us busy for quite some time. We experimented with several approaches like volumetric lighting and manipulating meshes, but in the end decided to go with a

Developer: 12 Angry Devs

Release date: 06/06/12

Development time: Roughly 18 months, not full time

Development budget: Just enough for Chinese takeout (seriously, we had no budget)

A fun fact: In one of our levels the girl of THE BALLOON QUEST floats around in the background. Also, one of the first mechanics for Dr. Shadow was the ability to “flip” as seen in WWW.

Team members: Florian Jindra, Michael Fuchs, Markus Huber, Martin Kenzel, Martin Klappacher, Vinzenz Mayrhofer, Sophie Müller, Clemens Stangl, Patrick Topf, Stefan Wiesenegger, Michael Kenzel, Manuel Hoffmann, Vedad Siljak, Andreas Stallinger, Michael Webersdorfer

shader-based approach.

Another tough nut to crack was the movement of the Dr. Shadow character. Mr. Light has a pretty traditional movement, but Dr. Shadow needed to be able to walk on walls and ceilings, to stick to and to drop off those level parts. We had a long and tough time of tweaking and adjusting the abilities of Dr. Shadow to make it work within the setting and for each level specifically.

AH: What’s the dev scene like in Austria? Are there many opportunities?

12AD: A lot of student projects are produced at the University of Applied Sciences Salzburg because there are art and programming courses for game development. There is not a huge gaming industry in Austria, only a couple of companies that are mostly based in Vienna. So quite a few of the students end up going abroad to work after they graduate. Of course, we hope that this is going to change in the coming years because of all the young game development graduates who might try to build up their own company. AND YET IT MOVES developer Broken Rules actually started this way, and more of that is sure to happen. 🎮

