Project 5D

Game 1: Poltergeist!
Report written by Eevi Korhonen

The team

As per the name, we had five people: Henri Kuismin, Joni Rissanen, Jori Kemppi, Tero Koskela and Eevi Korhonen. Everyone worked on-site every day, except for Jori (sound designer), who arrived on the second day.

Schedule

We had five days and five hours per day each to spend on making the game. We started on 31 May by coming up with the game idea and then we worked straight on til 4 June. We met on 7 June to make the post-mortem and write this report.

Original High Concept

You are a poltergeist with a mission to scare the living daylights out of your victim. You do this by clicking on objects in the room. Scaring the victim fills the scaremeter, and after it has been filled sufficiently, it starts to fill up the ectoplasm meter. The ectoplasm can be used for power-ups, which are one-time super-scary events. But beware! If the victim gets too scared, he will call an exorcist for help, who will use his holy aura to stop you from using objects and help calm the victim (thus lowering the scaremeter)

Day by day

Monday 31 May
We spent the first ten minutes learning how to use SVN, and the rest of the day learning it for real. Lot of time was wasted with software issues, but you can't really help it when you're unfamiliar with them.

Gamewise, we got the main menu working, slightly randomised character movement, main character and most of his animations and UI elements sketches plus beginnings of a sound engine.

Tuesday 1 June
Art and sound progress well, but we hit code problems. Things that were simple with AS2 were not so simple with AS3. We had to abandon all hopes of proper code architecture and start coding almost everything into a single class, which of course meant that we could have only one programmer working efficiently. Sounds were still a major problem. UI code finished and first [and only] level graphics imported into Flash.

Wednesday 2 June
We gave up on the idea of making a mute button and focused on making the sounds working generally, which finally worked. We also made the decision to limit the game into a one-level game because of time constraints. Almost all sounds were finished, some animations left in the art department.

Thursday 3 June
First rough playable finished, in hindsight way too late. Sound effects finally worked. Switching placeholder graphics with real ones and making the exorcist character.

Friday 4 June
We rushed to finish all the assets and crush all the bugs by 3pm, but could not do it.

Overall view

For a first project, it was a good learning experience. With better time management we could've finished the game. We definitely ran out of time with the game. It was bit sad to release a buggy version of the game, knowing it could've been so much better. But good graphics and sounds saved a lot.
The team spirit was good, and working was fun until the afternoon on the last day.

Making of…

Code

AS3 was quite a new thing for us. We did the classes based on the structure that was taught to us in the previous week, and the hierarchy of classes was bit confusing. We spent too much time on simple things or things that should be simple. The breaking point was that we couldn't access the timeline inside movieclips (or nested movieclips), and we decided to give up proper class architecture. After that it all started resembling noodle soup. This spawned the problem that two programmers can't edit the same file at the same time (and SVN caused its own problems). Learning the tricks of SVN also took its time, and dealing with the conflicted files cost us some production times.

Sound caused a fair share of its problems. We spent like two-three days struggling to get the sounds working. What we learned was not to make a separate class for sounds. Also, Flash has a weird way of importing sounds, which caused the game to crash until we learned that it was the importing that did it.

We learned a lot about how to do things better for the next game: naming conventions, agreeing on the code architecture etc.

Graphics

The graphics were made using Illustrator and Photoshop and the animations were made in Flash. Exporting bitmap images for Flash was time-consuming and eventually didn't quite work as there were problems with image sizes (it could show up as taking the whole screen or in the wrong place). Registration points ended up in wrong places, and we thought we could change them afterwards, but unfortunately no. We'll have to pay more attention to that next time. Cloneable elements (backgrounds, objects) and predefined sizes for art assets are on the wish list for the next project.

Sound

Renoise and Reaper were used to make all the sounds. The sound pipeline worked smoothly from start to finish. The sound designer was the only one who didn't have to use all of the reserved 25hours. The only problem was that we had to repack some of the sounds to be Flash-digestable (under 160kbs and constant bitrate, just in case). The lesson from this game was to save an unpacked version of the all .wavs in a separate library (all of them were saved, just not in the same library but all over the place).

Production

The schedule was made on Excel. A post-it wall was also experimented with, but failed due to lack of communication (and the post-its not sticking to the wall). The communication started to deteriorate at the end of the game, e.g. with some of the gameplay decisions not making it to the instructions.

Personal report: Eevi Korhonen

Monday 31 May

First time is always hardest, but we still managed to come up with a game idea in 15min, and then it was off to implementation. Unfortunately we've had several software and programming issues that slowed today's progress. I expected as much as we're still unfamiliar with the language and the SVN system, but hopefully things will smooth out by the end of the project (or projects).

I spent my morning refining the game idea and mechanics and setting up our dev blog. Afternoon was all about feature/task list and solving small problems.

Thought I'd find a copy or template on how to make a feature/asset list, but in the end had to make it from scratch. Just made columns for task/feature, importance and status of the previous and space for notes. Then I also divided features, art and sound assets into their own areas, so I could see more easily what we were still missing. Spent some time struggling with the terminology, but soon decided that time is more important and nobody is going to care about the wording and just made it. The asset list was bit problematic as we still don't know exact game progression, but it has the most important things in it (except for sound as sound designer doesn't come until tomorrow/day after tomorrow). Will make the asset list priority tomorrow morning.

Today's hours: 5
Total: 5/25

Tuesday 1 June

With the advice of a fellow student I changed the task list into a physical post-it note wall. Problem: notes won't stick. Will buy better post-its or blu tack. Still find it more useful to keep personal track of the production and in this sort of small, centralized production it seems to work.

Morning's coding problems were very demoralizing, as they were such basic stuff (at least on AS2). Did my best to help, but in the end I decided we needed to contact our teacher (same person who taught us last week the 7-hour "introduction" to AS3) with the problem. It's bit frustrating waiting for an e-mail, but there is basically no one else in the school with sufficient AS3 knowledge. I distracted Joni to work on something else, since he'd been stuck on the sound channel problem all morning, and he did get the UI meters working alright.

We also had to abandon making a proper class structure for the game, as it just wouldn't work with our programming knowledge. The guys are saying they'll look into it over the weekend, and it's probably one of the biggest issues we face at post-mortem. Hopefully we'll learn to do something with good programming methods ☺

Spent afternoon working on the 5D2 logo and thinking how to solve gameplay issues. Probably need to test the first playable before we can come up with any meaningful solution.

Also, some more tiny problems with lab access and SVN, but quickly sorted out this time.

Today's hours: 5
Total 10/25

Wednesday 2 June

Kept updating the blog and doing small pieces of art. Gave up on the post-it idea for the moment. Started working on the instructions (both text and visuals).

Solving the game design issues were the main feat of the day. We were still uncertain how the helpers [the people the victim calls to his help, later on reduced just to the exorcist] would work and how they affect the game, so once I took the subject up we managed to find some sort of direction for the game. At the same time, we decided to drop the amount of levels to just one because the programming had taken so much time. Plus I'd miscalculated the amount of time each art asset takes. Good things take their time. I'm glad that the team has a good sense of what's important so they can be quite self-guided, but sometimes makes it harder for me to keep track of what they're doing. Lucky it's a small lab so I can roll with my chair to them and just ask.

Sounds started to work finally, which was a relief after three days of being stuck on that issue. Mood seems much better and I feel like we can finish this game in time.

Hours: 5h 15min
Total: 15/25

Thursday 3 June

Continued working on blog posts, instructions and some UI elements.

Things are going better. We had cracked the sounds, but sound effects weren't working. Instead, they broke the game when imported into the library. So we tried a lot of things and even asked for help, but in the end we had to resort to another "chewing gum" solution. It seems it was the mp3 bitrate that was the culprit in the end. At least we have more things for the sound designer to do; he's been so fast I'm running out of tasks for him.

Hours: 4h 45m
Total: 20/25

Friday 4 June

Did a lot of here and there: instructions screen, buttons, end screen and credits, but it still wasn't enough.

The schedule fell apart in the afternoon. We were at the last stretch so not having a working physical copy (post-its) and having not updated the Excel-sheet, I forgot some of the tasks that still needed doing (power-up animation implementation), which caused bit of last minute panic . Bad error. Next time must aim for all the assets to be done by Thursday/fourth day (or at least nothing major unfinished), so that we could really focus on the programming and polishing on the last day.

We should've had a clearer vision of the gameplay. With some balancing it could be a decent game, but I'm still bit suspicious of the mechanics. They are probably confusing and not clearly communicated. As an idea

it was fun, but as the game part of it wasn't clear from the beginning, we couldn't really aim for something that wasn't there. We'll do better next time.

Bit disappointed that we couldn't polish the game, but the team seems quite happy with the game and eager to work on it a bit more to make it more playable. No one has managed to get completely frustrated or annoyed with the project, so that's a victory. I think we'll have a bigger drive to make a better game next week. And we did finish the game in 25 hours, even if it's unbalanced and buggy. Unfortunately people had stuff to attend, so we couldn't enjoy a drink together after our first finished game. Shame.

Hours: 5
Total: 25/25

Personal report: Henri Kuismin

Day 1

We started our first game today and were creating the idea in the morning together with the team. I started programming by creating some basic AS3-classes for our project with Joni so that we could work on different classes at the same time. Then I created very simple AI movement for the main character of our game while debugging the existing code all the time.

Day2

Today I started by finishing some code from yesterday involving character movement and got it to the point that I could move on to other things. We were then trying to make our movieclip classes to work with not much success and so we decided to use a simpler but not as efficient way of programming.

After that decision we got many of the basic things in the game to work properly such as clickable objects and UI elements. In the end of the day I got our custom cursor to work almost as it should but still left some of it for tomorrow.

Day 3

Today I got a lot of things done. I programmed many of the objects in the game to behave as they should although I had some problems while doing it. Most problems were just writing errors but there was also some trouble with downloading and uploading other people's files from the server.

I fixed some problems that we had with the mouse cursor replacement and after getting more graphics and animations from Tero I added them to the stage in flash as well as into the code. Now the character moves on the screen while the player is able to click on other objects there to start their animations.

Day4

The game is starting to look like a real game already. I added some animations into the code for our main character today but I still have to finish those tomorrow. I also made a lot of linking between other animations in the movie clips within flash and our actionscript files. I didn't have any huge problems today but had to fix some small errors in the code all the time.

Day5

Today we were all in a hurry trying to get the game finished in time but because of some problems we couldn't do it in the end. You are able to finish the game now though and play it through but there are some huge bugs and some of the things are just clearly unfinished.

The game looks and sounds good but as we had to use many hours of coding into fixing a couple of bugs during the week, we eventually ran out of time. But I think that with just a little more time we might have gotten the whole thing done and maybe we will if we decide to finish the game some time later.

Personal report: Joni Rissanen

31.5.

We started the project by learning the basics of TortoiseSVN. Then we decided the game concept, which didn't take much more than 10 minutes.

At first coding was hard to get started, since ActionScript3.0 is still quite new language for both of our coders. After a while of looking and studying the practice-code from last week we understood the basics of the game motor and started coding in full efficiency.

I managed to make the coding for start-screen and instructions-screen, as well as buttons to start the game and toggling between the aforementioned screens. I also started to work on the coding of sounds, but I didn't finish it because of some unexpected errors that I couldn't simply understand.

1.6.

It wasn't the perfect day, but a good one anyways. The first two hours I battled against the coding of sounds and got utterly defeated. Thus, we asked for help outside, but SVN didn't send the newest .fla-file which caused some confusion. We didn't get help to this problem today, but maybe tomorrow. It's pretty sure that these problems with voices are beyond my skills, so I will settle for frustrated grunting and waiting for some divine intervention.

Then I started to work with scare-o-meter, ectoplasm-meter and powerup-buttons, which all turned out to work as they should. At first I tried to create classes for all of them, but I wasn't familiar enough with the engine and got confused, so I crossed the fence where it's on its lowest and made them all in one of the main classes that run the game. I also got problems with adding movie clips inside movie clips, so I just made separate movie clips that show on top of each other. Not the best solution, but works and looks good.

The rest of the day was rather frustrating, since we decided not to add too many classes since they would only make coding difficult because of the unfamiliar engine, so we wrote code in one main class that runs the game (I'm probably going to mention this class more often, so let's call it by its name "GameLevelScreen"). Thus only 50% of our coders were able to work, while the rest of our two-headed coding team supported the other by finding hints from the internet.

2.6.

I'm Finnish, so I like silence. Making sounds are against my culture. I tried to make the background-music work, and it took only four hours, some help from the outside and some lucky guesses. Now it runs the music from a class that was supposed to run all sound effects, but after a while I realized that there would be much less and more simple code if I just put that simple play-command in GameLevelScreen-class. Working between classes with such a simple command would only make things unnecessarily difficult. Considering that I didn't quite succeed in making the sound effects work even now.

3.6.

I made the sounds work! Most of the problems were caused by the ultimately hostile Flash CS3, which didn't like me importing sound-files to its library. When a sound-file was imported, whole show stopped working and didn't get better even the imported file was deleted from library. I got it working by dragging-and-dropping files to library instead of selecting File -> Import -> Import to Library, and now all sounds in the game work (except those with too high bit rate for Flash (160 kbps), but they will be replaced tomorrow). I also had time to fix meters for ectoplasma and scariness and made the hover-system for powerup-buttons.

4.6.

Done but not quite finished! Only drawbacks in game are that you can't lose, most power-ups can't be seen, credits screen isn't done and a wagon full of bugs and things left undone (exorcist doesn't make the game any harder etc.). If only I had succeeded making voices work sooner many of these problems would have been easily won. Maybe things will be easier next time, and most probably they will be.

As this isn't actually finished game, I can't say it's very good. Actually I probably wouldn't call it very good even if it was all done, but as the first game in this project it has been successful considering all the things I've learned making this little piece of bigger awesomeness.

Personal report: Tero Koskela

Mon 31 May

Met up with the other 5D people at the Score classroom. We decided on the game idea. I started sketching, drawing and animating the main character. Before lunch I had finished some small animations and almost finished creating a basic walk cycle animation for the main character. After lunch I finished the walk cycle, did some more smaller animations and sketched out and started creating some elements of the UI graphics. I wasn't able to find a Wacom tablet that wasn't locked down in any of the classrooms and didn't bring my own, so I just created the basic forms for the buttons, icons and counters and decided to draw the final graphics tomorrow.

Tue 1 Jun

I continued from yesterday and started working with the UI graphics right away. I made a template for the power-up button and one icon, so that's pretty much one button finished and three half-done. After I finished with the UI stuff, I started building the graphics for the first level, the living room. Before going to lunch I had most of the furniture and the basic room almost finished. After lunch I made some more furniture and animated some, and ran into the first real problem: Henri and Joni had suggested making bitmap graphics, but exporting flash animations to bitmaps would require repositioning each frame, which would take too much time. In the end we agreed on using the vector movie clips I'd already made. I finished off with drawing one more icon for the power-up buttons. That leaves two more icons for tomorrow, along with an insane amount of other stuff... I hope the next game will use a predefined size for bitmap images, along with tileable background graphics, that'd be more manageable in one week's time.

Wed 2 Jun

I started the day by finishing the icons and chopping the power-up buttons up for saving and importing to flash. I also made the two counters and a dock for the power-ups, so that's pretty much the UI graphics finished. We decided to cut some corners and only make this one level as good as possible and forget about the other ones, which means I'll hopefully have a bit more time to fine tune the graphics. In the afternoon I designed the Exorcist, the other character for this level. I also started working on the logo and title screen graphics.

Thu 3 Jun

In the morning I redesigned the logo I had started the previous day and drew the start screen background, both turned out quite nice. I also tweaked some of the animations of the main character and copied some to the new character. It took a lot of frustrating tweaking to get the animations work on the new character, and I still had to settle for a barely adequate walk cycle. The characters now have dying animations, too. Right now I'm fairly confident I'll get all the graphics done before the deadline, but who knows. In the next game I'll definitely have to come up with an easy way to copy old animations to new characters...

Fri 4 Jun

I spent the first half of this day drawing the power-up animations and adding some finishing touches on the title screen. After lunch pretty much everything about the Exorcist character turned out to be unusable, so I had to start over with the animations in almost no time at all. Time was really tight but in the end and I got some usable animations together.

Right now I have really mixed feelings about this project. It was really fun working over the week, but having worked all this time on a game that we weren't allowed to finish even if we wanted to seems really, really pointless. I think the things that are implemented in the game mostly look really good, but unpolished. The start screen graphics have some areas which were not meant to be seen, so they look like crap. The graphics for the power-ups have been made, but they are not correctly implemented in the game, which really frustrates me. In the next game I'm sure I'll try to keep animations created in flash to a minimum and concentrate on making the graphics in some other way. We really could use another graphic designer in the project too, there was just too much stuff to do in this game, even after we settled for just one level.

All in all, working was fun but not being able to finish what we started sucks. I'm afraid this will lead to us cutting even more corners and making less ambitious stuff in the next game, just so that we won't have to publish another unplayable game.

Personal report: Jori Kemppi

Tuesday, 1 June 2010

I joined the first iteration of the project on its secnd day. Eevi introduced me to the idea, and I saw some graphics. I started working on the theme music – I almost fnished it, needs a little tuning later on. I also finished some of the SFX: the sound of the jumping television, phone call and the character's steps. I inted to continue on the SFX tomorrow. I should probably ask for some ound equipment from the AV kiosk, so I wouldn't have to look for everything on the net.

Hours: 9-12, 13-15 (5)

Wednesday, 2 June 2010

Today I finished a pile of SFX. Clicking sound, fireplace, ectoplasma drain, praying wind pillow floating and the table floating in addition to suggestions for victory and losing music. I also made background music for the title screen. When all the sound clips were finished, I still had to check the levels. Some of the sounds were quieter than others, and you can't get the whole picture until you test them in the game. The mic on the laptop seems to be enough for recording purposes at least when the recorded sound will have lot of effects on it but I should still go to the AV kiosk at some point.

Hours: 9-12, 13-15 (5)

Thursday, 3 June 2010

Today I only spent the morning hours at the school. Because some of the graphic elements were missing, there was no point for me to sit there doing nothing, so I went home. In the evening I mixed the theme song into its final form.

Hours: 9-12, one hour in the evening (4)

Friday, 4 June 2010

Today I encoded the sounds that weren't working well with our engine for some reason. Switching to LAME's newest version and constant bitrate seemed to work. In addition I made some missing sound effects. It seems I didn't use all my hours, but the team didn't need more music from me, and even after long testing I couldn't figure out anything to fix in the current material. Maybe next week, when I get to work from day one I'll have an easier time to fill up my whole 25 hours.

Hours: 9-12, 13-15 (5)

Total: 19