

P O S T M O R T E M



INTRODUCTION

This is a postmortem for *SmallWarz*, a game created by Sharp Mindz during the course „Game Programming“ at the Technische Universität Berlin, Germany. The idea of the course was to create some rapid prototypes and finish one of them during the rest of the term.

The game is a minimalistic RTS and the genre is action strategy. It is 2D and sprite-based and up to four players can fight against each other. Some artificial intelligence is supported, so that opponents can be handled by the computer, to make the game playable by one human alone. For further information about the game, play the tutorial. Have fun.



WHAT WENT RIGHT

using online messenger and subversion

We used Skype a lot and it helped to keep us focused and to answer questions about the code fast. We used Subversion to manage our source code and it was a pleasure to use it. The first prototype we made this term taught us to not manually merge source codes of different programmers. It was also great to have a compilable, working project in the repository at all times.

rapid prototyping

We used this approach and it has its merits. Especially for game programming it's a more modern approach than making fully fledged design documents first.



good communication and team work

After one of our team members left, the team work was very good and we had no problems with our communication. We had to use English as our communication language and not German (our native language) because we had one Spanish member in our team. That was a bit strange first, but we handled it. Pair programming, which we could have done more often, turned out to be very efficient and fun.

late start with real graphics (as planned)

For the most part of the term we had only placeholder graphics and no sound, so we could concentrate on the gameplay and the logic of the game instead of the audiovisual appearance. We planned to change this fairly late, and we did it even later than planned. It was a good decision to delay it somewhat, a lesson we learned from our first prototype this term.

pragmatic approach to what could be done

We tested some things and after we spent some work on it we were able to discard it if it could not be implemented in the game or would make the game less fun. The last few weeks were very exhausting but also very productive and fun.

WHAT WENT WRONG

work planning (German: Projektstrukturplan)

We should have made one and updated it regularly so that every team member could easily find out how the project is progressing, what is to be done, and how this work item fits in with the whole project. A ticket system would have been also nice.

team problems

One of the team members left the team mid-project. This is a general problem with student projects that is not easy to handle. Think about it at a proper time. We should have programmed collectively more often. Either online while communicating by messenger, or all in one room.

meetings – to long and the false topic

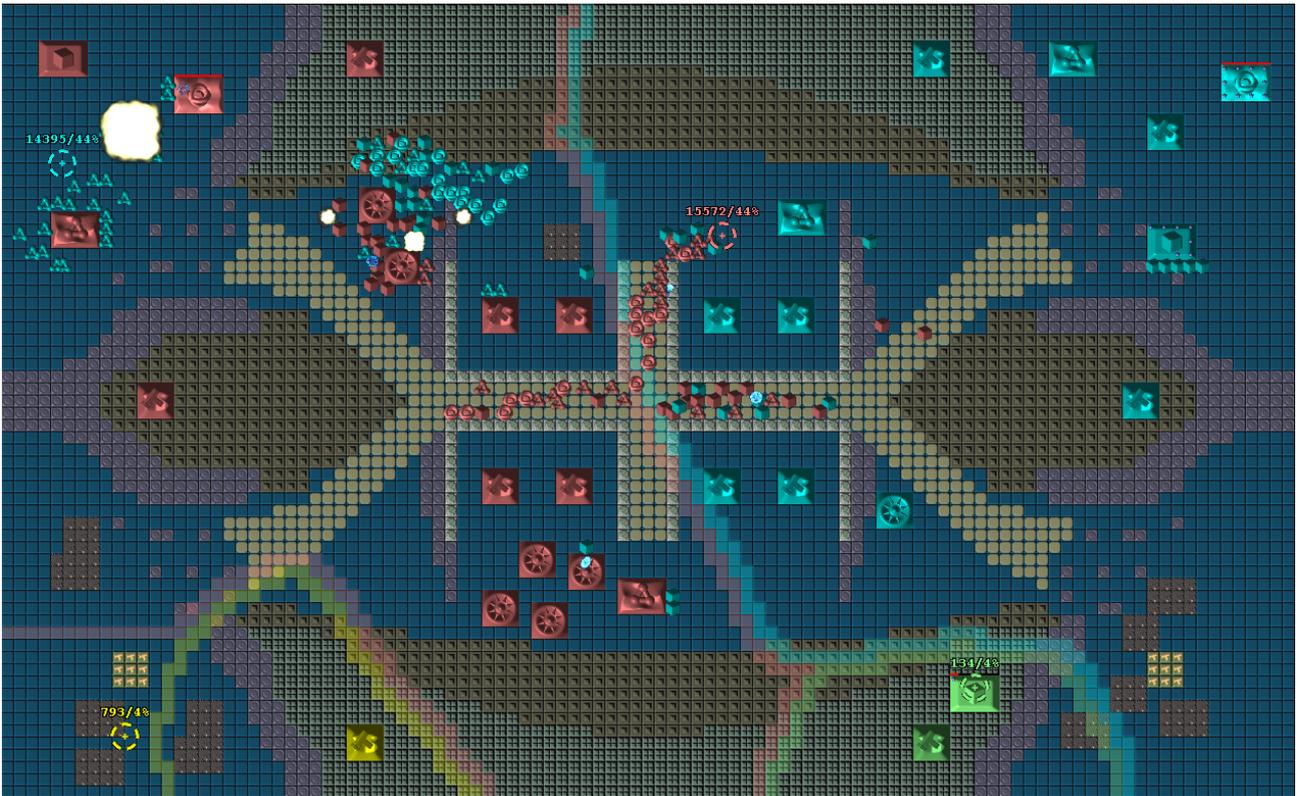
We had weekly meetings which have taken much time. Too much. And we definitely had too few meetings about the architecture of our code.

non-constant working speed

Around Christmas and the first weeks of the new year we didn't work really hard on the project. Try to avoid this.

specify the model exactly

Especially when you use the model-view-controller pattern, as it was suggested in the lectures and as we have done with success, specify the game model as exactly as you can. Not doing this invites further problems. Also, comment all this in the code.



refactoring

Refactor early, often and merciless. We have not done this and code rot has taken its toll. Use design patterns where appropriate and have short classes and methods. Maybe use the law of Demeter (see http://en.wikipedia.org/wiki/Law_of_Demeter). And don't repeat yourself!

CONCLUSION

We produced a nice, playable, and rounded game. Especially when taking the short time frame into account. We learned much throughout this project and we will be better positioned for the next one. So the conclusion is that the course is to be promoted. Join it in the next term and make your own little game.