

A9 Final Report

Team 10 – Zombie Apocalypse
Chad Nelson, Cole Anagnost, Tas Fox, Tim Flannigan

Final Report

Zombie Apocalypse



**Chad Nelson
Cole Anagnost
Tasewell Fox
Tim Flanigan**

1. CHAD NELSON

I remember the first time our team met; it was a meeting with four people unwilling to reach a unified proposal. In fact, we ended up submitting four proposals to Professor Mitra, hoping that he would in some way help our team decide which project to choose. Although I was somewhat dismayed that our team ended up deciding to implement Cole's idea for an apocalyptic zombie shooter instead of my massively multiplayer farm simulation game, I tried to keep a positive attitude.

During this project, there were several things I learned about myself, and several things I learned about group dynamics.

One thing I learned about myself was my pace of progress compared to others. I can move. This has many obvious benefits, but the distinct disadvantage that I have a tendency to leave fellow team members behind. Once I realized this, I tried to compensate by spending more time educating and communicating with fellow team members. In this way, I helped to pick up the pace of the team and where people were unable to keep up, I at least was able to communicate with them what was happening with the project. Because I hopped into coding early and had started learning things before others, I became the natural leader for the group and was a person to go to when others needed help. This knowledge gap that I had acquired by starting early was communicated with my team through meetings, and also one-on-one coding sessions with other team members (such as when I helped answer Tim's questions when creating the BuyScreen or looked over Tas's code at his request during a meeting).

As for lessons about group dynamics, I realize now that first impressions matter. If I start off a project with lots of enthusiasm, group members are going to assume that will continue. I also learned that there are two types of people and two ways to manage people. One kind of person is here only for the grade, and must be managed by constant oversight. They won't check in their code until an hour before it is due. They don't put in extra effort to make something spectacular. Hard deadlines and constant communication are key. Another kind of person is one that is here because they enjoy what they do and are seeking enlightenment. These types of people require less oversight and will surprise you with what they accomplish. The best way to manage this latter type of person is by encouraging them, communicating with them when they are stressed, and complimenting them when they contribute to the project something that is truly awesome. In our team, I feel we had a fairly even split of both types of people.

Another thing I learned about myself was that I cannot do everything. One thing I thought I did well this semester was working on my skills at delegating work. I'm a perfectionist, and as such, am so unhappy with the work of others that I tend to do a lot of the work myself. By working with Tas on a lot of coding, and delegating a lot of grunt work to Tim and Cole, I feel like I moved away from my former trend.

I think one thing that worked well for our group was our focus on continually added value to our code. Our project was complete in October, and yet it will never be finished. Once we had our framework in place for the game, we could incrementally add features to the game and continually add value. Thus, we were never pressured by deadlines because we always had a complete game.

One thing I would do differently if our group worked on a new project would be to let someone else lead the project. I would be interested in seeing what leadership qualities came out of my fellow group members that I may have suppressed this semester.

2. COLE ANAGNOST

Our first group meeting ended with four different project ideas, each as different as the member that had suggested it (and those were just the four we had narrowed it down to).

After submitting our project proposals and receiving the feedback from Professor Mitra, we finally managed to select a project idea.

Not too long thereafter Chad already had the basic framework of a top-down flash game in place. From there, our development cycle consisted of continually adding more and more features to the game (much like an agile development cycle). This allowed us much more freedom to focus on the details of the game that make it interesting, knowing that we had the foundation laid out and tested. However, this left the rest of the group in the dust at the beginning of the project, working to catch up on the basics.

I think the choice of actionscript as our programming language worked out very well. I had been looking forward to learning the language for some time now, and just had not had the chance. Interacting with graphics was straightforward, which allowed us more time to focus on the gameplay elements. None of us (besides Chad) had used actionscript before, however, so we spent a lot of time at the beginning of the semester learning the language. Chad was very helpful in this regard, and he did his best to help bring us up to speed.

I am happy with our end project, although I wish we could have iron out multi-player synchronization (TCP packets aren't the most effective, especially in our hybrid client-server architecture where all "server side" calculations such as zombie movement are taking place on the host machine and being forwarded out to the other players through the server). If we had known of these issues earlier on we could have cut multi-player in favor of a more feature-rich single player game, and we would have still had the extensibility to add multi-player functionality at a later date. However, I'm glad we took that chance with multi-player, as it was a great learning experience in real-time online multi-player game design.

3. TASEWELL FOX

When we first formed our group I quickly learned the value of compromise. During our first meetings, while trying to decide what our project would be, we came up with four different ideas. Each person in the group wanted to do their own project and no one would agree on the others. We all quickly learned that if we didn't work together we could never move forward, so we all swallowed our pride and the desire to do our own projects and chose one we could all get behind.

After we had our project going Chad quickly began working on getting things underway. During this time the rest of the group fell behind. I felt like it was important for everyone to be on the same page during the development of our project so we started meeting outside of our scheduled meetings to get everyone caught up so we could move forward.

It was very interesting to see how the different group members all brought different skill sets and work ethics to the project. I felt like we had some difficulties clicking at first, but once we all learned about the way the others worked, we were able to come together as a team and get a pretty good project together.

I really enjoyed the actionscript language that we used for our program. I was very hesitant when we first began and I wanted to write the program using C++ or C#. After I became more familiar with actionscript I was pleasantly surprised by the ease with which it manipulated graphics and sounds. It allowed us to spend a lot more time focusing on the game code and not dealing with sounds and graphics.

When the project was finished and we had our final project I was very proud of the final project and felt it came together really well. Overall I feel like our project has a pretty advanced feature set and all of the features work really well.

If I could have one decision back it would be not implementing the beta actionscript p2p features. I think it would have made the multiplayer a better gaming experience, but even using the socket TCP connection it worked reasonably well.

4. TIM FLANIGAN

The day our group first formed, the only idea at the time we had was some kind of multiplayer game. Somehow from that we came up with 4 different ideas, one of which wasn't even a game. To be honest the main decision factor in our project idea was the feedback we got about which project was the most complex. We picked our zombie game based mostly on that.

Once our project idea was decided, work on coding started out really fast. Chad put the base code together within a few days, and while that was good and really helped push us and get started faster, I think we should have taken some more time before it. It took awhile before I knew how everything was working, and I also had no previous experience with action script before this project. Although I had no experience in action script to start, I slowly started to figure out what I was doing, however my most valuable experience in learning action script was when Chad helped me out for a few hours one day and explained some things to me, and it made things a lot easier for me after that.

One other main lesson I learned through this project was that we should have thought more about multi player design. After finishing the project, I think maybe we should have just left out multi player all together and focuses more on a better single player experience with more features than we have now. Towards the end of the semester we realized that we needed to re write some of our code to make multi player work, and it probably still wasn't the best implementation possibility.

Overall after finishing the game, and doing our demo, I think our end product game out pretty well. The game is in a complete state, and can be played by anyone easily.