Thoughts and Analysis:

Reflecting upon the state of things with regard to the deadlines that needed to be met, the game turned out pretty well. The development did not quite achieve what we set out to accomplish: many ideas and themes were dropped to make time for what we considered to be priority. Such ideas include the level design being based around the walls gradually closing and the narrative within the game. I personally would have also enjoyed having time to create custom score for the game, but having a working product was more important and I am proud to say we've achieved that. What went wrong was essentially bad time management.

At first there was this underlying assumption that we would work on the various problems as a group, but our schedules were not compatible and as such progress that could have been made much earlier on was put off in hopes that better working conditions would arise, which they did not. The result was an incredibly backup up workflow, where deadlines were not met and the developments ended up rushed. The result: a game that, when compared to the original intent, feels as though corners were cut: no audio, no narrative, no item drops, no assets, less levels than ideal. While perhaps a little ambitious, with better working habits and team organization, these goals could very well have been attainable and the result would have been closer to what was originally intended.

This having been said, certain things were actually implemented over the course of the development that was not expected in our original outline for the project. The sword slash system using a cooldown based approach to improve resource management was a very spontaneous idea that truly added some seems of innovation to the game. It also served to add to the resource management of the game which in our original outline was a lacking development point, which we hopped we could compensate for through the introduction of item drops and powerups. These such resources having been neglected due to the rushed nature of the project, the cooldown system on the offensive ability we did implement was a very nice touch. Other things such as the boss was originally not going to be implemented, but happened again with the intent of being some form of compromise to the perceived lack of levels compared to what we had hoped to achieve, and the result was actually a quite challenging boss concept.

The game is not without its faults, and still feels closer to a tech demo than a finished product. But it turned out far better expected given the circumstances, which is something we are proud of. It also served as a good learning experience as far as object oriented programming goes. Looking back at the code, there is a clear learning curve being followed: the original code for the player using vectors for an x and y position that never makes use of any vector like properties, for instance, and then the “rat” class using some form of makeshift inheritance to vary it's attributes based on a “type” attributes passed through the constructor. The rat is also running off hard coded values for certain things, which is not the case with the other similar enemy classes. You can also see historical remnants of this “evolution” in code, through how an entity interface was added later on to easily keep track of global damage methods (damaging a player in much the same way as you would damage a rat) whereas before the traps were implemented the code seems to suggest the damage is being calculated direct to the health value of the entity instead. Finally inheritance and overall better object oriented practices began to surface around the point of implementing the traps, as well as the wizards and notably the projectiles, which while they function together well, are coded in much different ways.

Division of labour:

Ryan Lau: Contributed to the initial brainstorming, participation in consultations, assisted in presentation.

Maxim MacFarlane: Implementation, coded the game rules, AI, interface, update loops and behaviours for the various classes, debugging, and level design implementation. Primary access to the code. Contributed the original concept, presentation slides and writes ups.

Archin Wahdwa: Class planning and definition for majority of enemies, general planning for class arrangements and outlined the general class definition for all trap classes. Level design brainstorming and planning of some levels. Consultant for design elements feedback, proposed concept for the boss battle.