

Write up

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0.1 Project Summary

The purpose of this project was to build an API that could help the user in building a program that would project maps and a dashboard onto the screen in a GUI format. This program, using the information presented in the map(s) given to it would have an artificial intelligence called the overlord disperse drones across the map in the most efficient deployment locations possible in order to mine the minerals that are present in the map. The overlord would produce drones by using the refined minerals given to it at the start of the game. The overlord would have a certain amount of ticks(basically turns in the context of the game) to obtain the most amount of refined minerals from the map(s) given.

0.2 Challenges

The main challenge for this project for me was making sure the GUI presented the information to the user in the most mentally pleasing format possible. This was the main challenge to me as this is what I was tasked with in order to best divide up the work presented. A challenge present to the group was programming the drones AI to move to the minerals in the least amount of moves possible all while avoid acid, walls and other drones.

0.3 Successes

My main success during this project was communicating with my team mates around the clock to ensure that no one got completely over whelmed with a problem, this way there was no spending too much time on one problem. Another success of mine was modeling are GUI from the old-fashioned TKtinker style into a more modern style that would seem more common in today's environment.

0.4 Lessons learned

One of the lessons I learned during this project was that communication is key in any assignment with more than one person. Without good communication it's most likely that a project will not meet deadlines and make enough progress fast enough to maintain any momentum. Another lesson I learned during this project was that while using certain modules in python, the documentation given by the developers(most of the time) is way better then any tutorial given by tutorial sites like GeeksforGeeks or TutorialPoint.