## **PROJECT OVERVIEW: AI Project Assessment**

**Overview:**

The entire project was interesting to work with the concept of A\* pathfinding algorithm and finite state-machine. However, the project was difficult, and a lot of the planned assets couldn’t be added but the implementation with some of the techniques was successful.

**Difficulty:**

The implementation of the A\* algorithm was hard as it was difficult to if not, impossible, to debug the algorithm while coding as it won’t work until it is fully set up let alone the number of unknown bugs to fix is time consuming. The algorithm is worse when you don’t have a complete grasp on how to set it up properly, if you don’t know how to set it up and how it’ll work, it’ll make using/setting up the algorithm impossible. The finite state machine was simple to implement and is easy to set up, depending on what you’re doing. For the project, however, didn’t need much to create it so it was easy to setup, if the transition to each of the different states is known and how it works.

To say it simply: The project was overall very difficult with A\* alone but manageable.

**Technique Efficiency:**

The techniques and guides were helpful overall and made the project easier to set up. However, some of the techniques and guides didn’t end up being used if not replaced midway through the project. The A\* guide was replaced with a tutorial set up made by CodeMonkey (YouTube/Unity) and the blackboard didn’t end up being used as there wasn’t time to set up. But the other guides were useful to use as reference to help with this project. The techniques were efficient in how well detailed it was and how to implement certain concepts and algorithms.

**TDD Usefulness:**

The TDD Document was useful overall as it allowed a clear idea and guide to how to structure the project and how to plan, such as game assets, methods/algorithms used in the project, how to structure code and code ethics. This gives not only a clean structure of how you work and how to do the project but gives ease of mind on what was planned for the project. If a project is planned then the TDD is absolute must to have completed so a good, generalized structure for the project is created and others will know how to complete this project, especially done in teams or people who wish to recreate the project.

**Other:**

Unfortunately the project may be done, but not all of the desired ideas was added in, such as for example:

* Health station
* Proper death mechanic

And others, however if given more time, these and other mechanics and techniques could have been implemented.