

ABSTRACT

Since an early age it is very important to introduce children how to care surrounding environment such as caring for plants to increase their basic knowledge. Therefore, as an attraction, it requires a visual display that describes the surrounding environment in 3D. So especialy children are interested to trying the *game* and implementing in real life.

The purpose of developing caterpillar behavior is to find the closest distance to move from one tree to another. Floyd-Warshall is one algorithm that can be used as a search method for the shortest for caterpillar to find the shortest path with the lowest cost. Also using features in the unity engine to make this *game*. By playing this *game*, especialy children can find out how to care for the environment by caring for plants.

Keywords : Unity, *Multi Agent*, *Floyd-Warshall*, *Caterpillar*