Assessment for ICTGAM423, ICTGAM533

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# Assignment 1: Tower Defence (Tasks 3 and 4)

## Describe Dijkstra and A\* algorithms, what are the difference between the two?

Dijkstra’s algorithm finds the shortest distance from a start node to target node in a weighted graph.

## Which game genres are you likely to use A\* with and why?

Real-time strategy

## Which game genres would you NOT use A\* with and why?

Fighting games (one-on-one): most examples

## What limitations do path finding algorithms put on game design and development.

## List 4 algorithms and/or paradigms do AI use in games.

* Bellman–Ford algorithm
* Dijkstra’s algorithm
* A\* search algorithm
* Breadth-first search