## AI & P Final project

Ahmed Mahran and Ferdy Sloot

This code has been made for the final project of Artificial Intelligence and Programming, a subject for second year Creative Technology students. This project has been coded by Ahmed Mahran and Ferdy Sloot and has been handed in on 26-1-2022.

The code has been made with inspiration taken from an online tutorial by freeCodeCamp.org (<a href="https://www.youtube.com/watch?v=XGf2GcyHPhc&t=5693s">https://www.youtube.com/watch?v=XGf2GcyHPhc&t=5693s</a>)

The code consists of a main class with an update and main function, the other classes consist of an area class(draws the area and grid), snake class(handles the snake and it's movement, has an array of cube class objects), ai class(copy of snake, but has an ai\_move method instead of an input move method) and a cube class(draws cubes and remembers their directions). As of now, the snake is able to be moved by inputs from a DDR dance pad. It will move according to what arrows you press. An Ai enemy will hunt the player down, when the player touches the ai, it will be game over. When the snake gets to a piece of fruit that spawn on the map at a random location, the snake grows and the fruit respawns at another location. A music library might be implemented by the time the exam takes place, but that's not a guarantee. It will be game over once the snake runs into itself or hits the ai enemy. A class diagram can be seen down below.

