Rasta Shark

Dominic Matthews s2638754 & Hans Nielen s2336693

For the final we have created a game of “reverse Pac-Man” called Rasta Shark. The goal of the game is to catch all the joints fleeing the Rasta Shark throughout the maze. To do this an Arduino controller is used. By pressing buttons on the controller Rasta Shark can be send in different directions to chase the joints. Using serial communication and the Serial library in Python the button presses are communicated to the game to be processed in the event handler. The joints are fleeing away from Rasta Shark directed by a greedy search algorithm which uses Manhattan distance to rank options. Each individual joint has different characteristics, shown in their speed and target distance away from Rasta Shark. The maze is randomly generated using code by Shaun Lebron found online (<https://shaunlebron.github.io/pacman-mazegen/>). The music used throughout the game is 8-Bit Reggae by Anders Enger Jensen, we do not own any right to this music.

