Dots and Boxes

David Wang Xinyue Chen Yan Liu Zihao Wang January 23, 2020

Choice of game

We chose the game Dots and Boxes because:

- 1. It fulfils the criteria for a combinatorial game.
- 2. It is relatively simple to learn and play.
- 3. It seems fairly interesting to play.

Useful Links

- 1. https://en.wikipedia.org/wiki/Dots_and_Boxes
- 2. https://www.youtube.com/watch?v=KboGyIilP6k
- 3. https://www.wikihow.com/Win-at-the-Dot-Game

Program type

We are going to begin with a player, that is a program that can make legal moves. We will try to improve upon the code and algorithm to reach the level of a solver eventually.

Division of work

We anticipate that about 70 percent of the code will be written by us explicitly. The rest will likely be taken from the Internet.

The work will be divided as such:

- 1. One person to build the user interface
- 2. Two people to conceive the algorithm
- 3. One person to build the actual program