

Introduction

For this project, we're aiming to build the game of Domination, with a minimum of one human player and up to 4 human players, with AI filling in for all others. This will solely play 4-player Domination.

Problem Statement

Playing Domination requires tracking a number of rules and is difficult for the colourblind. Our program of Domination aims to solve these issues, by utilizing computer players and appropriate options to overcome colour vision deficiencies. In addition, to leave a game of Domination unfinished with the intention to return to it later requires reserving space in your home, a problem we will solve with a save system, so as to allow human players to play in as small a timeslice as they desire.

Stakeholders & Key Interests

Stakeholders	Key Interests
Players	Playing the game, minimal need to reference rules.
Game of Domination publishers	Our potential plans for distribution, what effect our program may have on their unit sales.

Summary of System Features

- The system shall provide computer players in a number specified by the human(s) playing Domination, so long as total players do not exceed four.
- The system shall enforce the rules of Domination so as to prevent illegal moves and game states.
- The system shall enable the taking of turns in clockwise order, and randomize the first player to get a turn in a new game.
- The system shall provide a save option, allowing for games to be resumed in the future.
- The system shall provide two difficulty settings for computer players, "Easy" and "Hard".

- The system shall be executed from a runnable jar file.
- The system shall provide alternative colour schemes or, preferably, symbols to assist those with colour vision deficiency while preserving the intended colour scheme.
- The system shall be built, insofar as is reasonable, to support a future networked version.

Project Risks

- The team lacks knowledge of networked applications, which will make building the program with that in mind very challenging.
- The board of Domination is not square, which will complicate the representation of tiles significantly, due to the intention to mimic the appearance of Domination.
- The board of domination has side areas for the storage of reserve and captured pieces, which, coupled with the unusual board dimensions, could take significantly longer to implement than expected.
- Finding a not just acceptable, but pleasing representation for stack size, & stack contents is likely to be challenging when coupled with providing for players with colour vision deficiency. A representative token is likely to be extremely crowded with a size counter, symbol alternative for colour, and potentially more. Especially at smaller window sizes.
- Computer players with any degree of strategy are likely going to be a difficult prospect, and making the difference between “Easy” and “Hard” stark and noticeable to the player is unlikely.