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Hivolt

Introduction

The purpose of this project is to recreate the PLATO game hivolts using Java. This program is a reverse engineering of that game, to the best of my ability. I worked with Hunter Norte, and David Wei.

Specification

The specification of this project was to reimplement the Hivolts game with updated graphics. This program meets most of the requirements presented by the assignment. Here are some important requirements that this program fulfills in creating, a game board, player, mhos and fence, and an interface by moving the player. We have designed new and updated graphics to meet the criterion, also a grid to better play the game and multiple keyboard movement schemes.

Errors

There are currently a few errors with the mho's movements. The movement of the mhos are random and sometimes overlap the fences in the game board. Another error is that the player can move outside the game board and sometimes overlap the fences.

Overview of Code

The code consists of 8 classes, the main class enact the GameBoard class, which loads in the game. The GameBoard class initializes the JFrame, makes the game board, stores the X and Y positions/coordinates, and randomizes the positions/coordinates for later on use in Character class. The Character class stores the coordinates for the mhos, fences, and player and creating the border of the game board. Class Monster constructs mhos, class Fences constructs fences and remembers the location of the fence. Class Player constructs the player at a random point and remembers the location to later move the player. Class move extends KeyAdapter and allows the player to move, with the help of GameBoard and Character. Class Point keeps track of locations of all various characters.

Major Challenges

One major challenge I had was the decision between creating a new class or just keep on coding in the same class. Whenever I created a new class there were errors and took me a long time to sort out all the errors. Another challenge was making the player move without repaint multiple time. It took me a long time to fix the repaint problem, but I did it. Another challenge was to create an array that stored and remember the coordinates of the characters and stopping the fences from moving to a random location every time I move the player.

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