Introduction

This project represents an implementation in `C` programming language of the Hex game with multiple strategies.

Authors

Here is a list of the contributers to this project:

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This project has been accomplished under the supervision of F. Herberteau.

Usage

In order to use this project, it is necessary to have installed GSL library and set its location in `LD_LIBRARY_PATH`. The project can be run using the following commands:

```
GSL_PATH=path/to/gsl make # to compile and generate the server and the players
GSL_PATH=path/to/gsl make test # to compile and run all the tests
GSL_PATH=path/to/gsl make install # to copy the main files to the install repository
make clean #to remove all the generated files and establish the initial state of the
project repository
```

Where `path/to/gsl` is replaced with the path to GSL repository where `libgsl.so` is installed.

The game can be started between two players `player1.so` and `player2.so` from the install repository by using the following command:

```
./install/server -m [M] -t [T] ./install/player1.so ./install/player2.so
```

- Use the option `-m` to specify the width of the gameboard.
- Use the option `-t` to specify the shape of the game board. The available shapes are
    - t for a triangular board
    - c for a squared board
    - h for the hexagonal shaped board

  It is also possible to run the tests by using the command:

```
./install/alltests
```

Report

The report describing the results of this project in more details has been written in $\LaTeX$. All the resources can be found in the repository named `report`.

Use the following command inside the report's repository:

```
make # to generate a pdf version of the report
make clean # to remove the generated files after the compilation
make cleanall # to establish the initial state of the report repository
```