




Hungry penguins

Strategy board game

 2/3 people

Project Description

In the board game “Hey, that’s my fish!”, several players play turn-by-turn, moving at each turn one of their penguins on a hexagonal grid. After moving, the penguin eats the fish present on the cell where he has arrived, and the cell he left thaws. The game is over when nobody can move anymore. The goal is to have eaten as much fish as possibly by then. The complete rules can easily be found online.

Skills _____



(*)[The skill scale is from 0 (Fundamental Awareness) to 6 (Expert).]

Level 0 Where everything must start.

- + 500 xp Management
Project created on project management platform (e.g. github).
- + 500 xp Communication
Mailing list for developers, with all developers subscribed.
- + 500 xp Compilation
Standard build system, documented in a README/INSTALL file.

Level 1 You may now pursue to the level 1 of the project.

- + 1000 xp Documentation Required for lvl 1 validation
Source code documentation generated from build system and documented code.
- + 1000 xp Bug fighting Required for lvl 1 validation
Testing framework integrated in build system, including tests.
- + 500 xp Verification Required for lvl 1 validation
Continuous integration for all relevant build targets, including tests.
- + 1000 xp Text-based display
Define the datatype for the board, a game state, and display it in a text-based fashion.
- + 1000 xp Multiplayer game
Implement a multiplayer game (maybe text-based) where all players play on the same machine.
- + 2500 xp Graphical interface
A graphical UI should allow to start a game, selecting the number of players, number of penguins per player, and grid size using a menu, then play the game in multiplayer.
- + 500 xp Animation
Animate penguins when they wait, move, and perhaps eat.
- + 3000 xp End-game evaluation
When a connex piece of the board belongs to a single player, compute exactly how much fish he can eat there.
- + 2500 xp Computer player
Implement computer-controlled players: first a greedy one; then think of a smarter strategy.

Level 2 Level 1 must be unlocked to read this section