Overview

Data structures and algorithms have many elements and rules that can be used to design educational games. SortingGame and SortingCasino are games that deal with sorting algorithms and concepts related to them. The fundamental idea of both games is to let the players raise questions rather than to provide direct answers.

Learning goals of the games: Recognizing properties of sorting algorithms and understanding related concepts, such as: stable, in-place and big O notation.

Both games use 2 decks of cards:
1) Algorithm deck: Contains names of sorting algorithms.
2) Special card deck: Contains criteria related to sorting algorithms. In SortingGame, contains also cards that determine whether the game deals with the best/average/worst case scenarios of the algorithms.

There is also a "Robbery card" -extension for SortingGame where players can steal cards by matching an algorithm or criterion with it's description.

SortingGame
- Play until either deck is empty
- Winner is the player with most cards in victory stack

sortingcasino
- Winnner is the player with most points
- There are 2 spots for criterion cards and 3 spots for "best/avg/worst case" scenarios of the algorithms.

Winner of the round is the player whose algorithm's asymptotical time complexity is the best. Winner takes all cards on the table and in the pot if he/she does not have the worst case scenario for an algorithm.

Winnner is the player with most points. Clearing a table gives +3 points. Each card in victory stack gives +1 point.

Recognition of properties of sorting algorithms: In SortingGame, contains also cards that determine whether the game deals with the best/average/worst case scenarios of the algorithms.

Both games use 2 decks of cards:
1) Algorithm deck: Contains names of sorting algorithms.
2) Special card deck: Contains criteria related to sorting algorithms.

There is also a "Robbery card" -extension for SortingGame where players can steal cards by matching an algorithm or criterion with it's description.

Overview

Data structures and algorithms have many elements and rules that can be used to design educational games. SortingGame and SortingCasino are games that deal with sorting algorithms and concepts related to them. The fundamental idea of both games is to let the players raise questions rather than to provide direct answers.

Learning goals of the games: Recognizing properties of sorting algorithms and understanding related concepts, such as: stable, in-place and big O notation.

Both games use 2 decks of cards:
1) Algorithm deck: Contains names of sorting algorithms.
2) Special card deck: Contains criteria related to sorting algorithms.

There is also a "Robbery card" -extension for SortingGame where players can steal cards by matching an algorithm or criterion with it's description.

Overview

Data structures and algorithms have many elements and rules that can be used to design educational games. SortingGame and SortingCasino are games that deal with sorting algorithms and concepts related to them. The fundamental idea of both games is to let the players raise questions rather than to provide direct answers.

Learning goals of the games: Recognizing properties of sorting algorithms and understanding related concepts, such as: stable, in-place and big O notation.

Both games use 2 decks of cards:
1) Algorithm deck: Contains names of sorting algorithms.
2) Special card deck: Contains criteria related to sorting algorithms.

There is also a "Robbery card" -extension for SortingGame where players can steal cards by matching an algorithm or criterion with it's description.

Overview

Data structures and algorithms have many elements and rules that can be used to design educational games. SortingGame and SortingCasino are games that deal with sorting algorithms and concepts related to them. The fundamental idea of both games is to let the players raise questions rather than to provide direct answers.

Learning goals of the games: Recognizing properties of sorting algorithms and understanding related concepts, such as: stable, in-place and big O notation.

Both games use 2 decks of cards:
1) Algorithm deck: Contains names of sorting algorithms.
2) Special card deck: Contains criteria related to sorting algorithms.

There is also a "Robbery card" -extension for SortingGame where players can steal cards by matching an algorithm or criterion with it's description.