



DESCRIPTION of UML DIAGRAM [AM43]

CLASS GAME

This class is the main point of communication between the Controller and the Model: it contains all the main elements of a game including players, decks, and some stats.

All its methods are designed to initialize a new game (*pickFirstPlayer()*), all the 'deal' method etc.), administrate its enrollment and finalize the end of it (*pickWinner()*, *endgame()*).

CLASS PLAYER

This class represents all player-related data and actions. Here some of them are described:

- *deployed*: an array list to keep track of placed cards, appended in order of placement.
- *placements*: it is a 81x81 matrix of *int* representing a player's ground situation. Its entries are (-1), if no cards occupy that position, or the corresponding ID in the 'deployed' list.

N.B. *deployedID*: short for the index a card side has in the 'deployed' list, in ascending order of placement.

CLASS DECK

This class is related to the management of the different kinds of decks.

ABSTRACT CLASS CARD

This class is an abstract class to represent a generic card of the game. It is extended by two different concrete classes, one for the Objective cards and one for the Playable cards (the ones that can be placed on the ground during the game).

CLASS CARDSIDE

Given that each Playable card can be deployed on both sides, this class is equipped with attributes and methods to manage a single side of a card independently. This class is capable of handling any side of Resource, Starting or Gold cards.

INTERFACE POINTSRULE

This interface is designed to realize a strategy pattern for the computation of points. It has several implementations to cover all the possible ways to gain points during a game.