

Design Skeleton of Catan Dice

The structure of this game is constructed by two main parts, the basic logic part, and the UI design. The UI design is not introduced in the skeleton here, we only focus on the basic logic of the game.

The game are regarded as a kind of interaction between the elements. We realized the game by three kinds of elements, Dice, Player and Map, each element is a class which includes different instances and Methods.

The Enum Dice is a kind of Enum class, it's an enumeration of the six resources in the game: Ore, Grain, Wool, Timber, Bricks and Gold. It would have a void method roll to roll the dice, and a Boolean used to decide if the dice is available. Also, the get and set methods are required.

The class Player contains the basic parameter of a player, including an int array mark, which indicates the players mark in each turn. Six Dice to show the status of dices. A reset method to reset the status dice which means if the dice is used. And an int array to show the amount of six resources.

The class Map should be an abstract class, which contains four classes, Road, House, Knight and City. They have the properties of scores, state and able to be deployed.

