

## **Class Description**

Dice

- Class to provide the random resources from random dice rolls.

Player

- Class to store all attributes related to the player

Hex

- Class to store all attributes related to the hex

Piece

- Class to store all attributes related to the piece

Hex type

- Class to define possible hex types

Piece type

- Class to define possible piece types

CatanDiceGame

- Class to contain all required game logic

## **Main Class variables**

Dice

- Resource List

Player

- Player Name
- Player Score
- Available Knights
- Available Resources

Piece type/Hex type

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CatanDiceGame

- Board
- Players
- Turn

## Class Methods

### Dice

- rollDie
- rollDice
- setResourceList

### Player

- getName
- getScore
- setScore
- getAvailableKnights
- setAvailableKnights
- getAvailableResources
- setAvailableResources

### Hex

- getLocation
- setLocation
- getType
- setType

### Piece

- getLocation
- setLocation
- getType
- setType
- isUsed

### Hextype

- fromChar

### Piecetype

- fromChar

## CatanDiceGame

- initialiseboard
- boardToString
- getPiece
- setPiece
- getHex
- setHex
- getNeighbourPiece
- rerollResources
- nextTurn
- buildPieceValid
- buildPiece