model

ui

Main

-reader: Scanner

-videogame: Videogame

+main(String[] args): void

+getOption(): int

+showMenu(option): int

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Videogame

- PLAYERS_SIZE=21

- LEVELS_SIZE =21

-levels[] : array

-players[] :array

+addPlayer(idPlayer, namePlayer): String

+searchEmptyPosPlayer() : int

+levelImposibleToAdd(numberLevel) : boolean

+addLevel(numberLevel, requiredScore) : String

+validateIfLevelExist(numberLevel) : int

+validateIfPlayerExist(namePlayer) : int

+addTreasureToLevel(numberLevel,selectionType, url, score) : String

+validateIfEnemyExist(numberLevel, enemyId): boolean

+addEnemyToLevel(id, selectionType, scoreIfWin, scoreIfLose): String

+setPlayerScore(namePlayer: String, newScorePlayer: int): String

+searchPlayerLevel(namePlayer): int

+levelUpPlayer(namePlayer): String

+showLevelInfo(numberLevel): String

+countTreasuresInGame(selectionTypeTresure): String

+countEnemiesInGame(selectionTypeEnemy): String

+showMostRepeatenTreasure(): String

+showMostValuableEnemyInGame(): String

+showConsonantsEnemy(selctionTypeEnemy): String

+ordenatePlayersInGame(): [] Players

+showTop5BestScores(): String

3...21

Player

- id : String

- nickname : String

- score : int

- numberLives : int

- LevelPlayer: int

+Player(id, nickname, initialScore, numberLives, levelPlayer)

+get*:():*

+set*:()*

10...21

Level

-TREASURE_SIZE : 10

-ENEMY_SIZE : 10

-treasures[] : array

-enemys[] : array

-number : int

-requiredScore : int

-difficulty: String

+Level(number, requiredScore, dificulty)

+get*():*

+set*():*

+addTreasureWithObject(treasure): String

+addEnemyWithObject(enemy): String

+validateIfEnemyAlreadyExist(idEnemy): boolean

+showLevelInfo(): String

+showOnlyEnemy(): String

+showOnlyTreasures(): String

+countTreasuresByType(selectionType): int

+countEnemyByType(typeEnemy): int

+searchMostRepeatenTreasure(): String

+countDiamondsInLevel(): int

+countEsmeraldsInLevel(): int

+countRubiesInLevel(): int

+countGoldsInLevel(): int

+showScoreMostValuableEnemy(): int

+showTypeMostValuableEnemy(): int

+convertTypeEnemytoString(selectionType): String

+countConsonantsEnemy(): int

4...10

Enemy

-id : String

-selectionType : int

-typeEnemy : TypeEnemy

-scoreIfWin : int

-scoreIfLose : int

-positionX: double

-positionY: double

+Enemy(id, selectionType,scoreifWin, scoreifLose, positionX, positionY)

+get*():*

+set*():*

--Use----->

<<enumeration>>
TypeEnemy

OGRE
ABSTRACT
BOSS
MAGICIAN

4...10

Treasure

-selectionType: int

-typeTreasure: int

-url: String

-score: int

-quantyOfTreasure: int

-positionX: double

-positionY: double

+Treasure(selectionType, url, score, quantyOfTreasure, positionX, positionY)

+get*():*

+set*():*

--Use----->

<<enumeration>>
TypeTreasure

DIAMOND
ESMERALD
RUBY
GOLD