Angela María Ossorio A00365242

Tabla de trazabilidad entre análisis y diseño. Tarea Integradora 2

|  |  |  |
| --- | --- | --- |
| **Requerimiento Funcional** | **Nombre de la Clase** | **Nombre del método** |
| R1: Create player | VideoGameManager | +menu(): void |
| +playerMenu(): String |
| +addPlayer(): void |
| VideoGameController | +createPlayer(): Boolean |
| +addPlayer(): boolan |
| +playersFull(): boolean |
| Player | +Player(): void |
| R2: Create enemy | VideoGameManager | +menu(): void |
| +enemyMenu(): String |
| +addEnemy(): boolean |
| VideoGameController | +createEnemy(): Boolean |
| +nicknameExists(): boolean |
| +addEnemy(): boolean |
| +enemiesFull(): boolean |
| Enemy | +Enemy(): void |
| R3: Create treasure | VideoGameManager | +menu(): void |
| +treasureMenu(): String |
| +addTreasure(): boolean |
| VideoGameController | +createTreasure(): Boolean |
| +addTreasure(): boolean |
| +treasuresFull(): boolean |
| Treasure | +Treasure(): void |
| R4: Create Levels | VideoGameController | +createLevel(): boolean |
| +addLevel(): boolean |
| Level | +Level(): void |
| R5: Add enemy to level | VideoGameManager | +menu(): void |
| +levelMenu(): String |
| +addEnemyToLevel(): boolean |
| VideoGameController | +levelsToString(): String |
| +enemiesToString(): String |
| +enemyTypeToString(): String |
| +updateLevelDifficulty(): boolean |
| +getLevels(): Level[] |
| +getEnemies(): Enemy[] |
| +addEnemyToLevel() |
| Level | +addEnemy(): boolean |
| +enemiesFull(): boolean |
| +enemyInside(): boolean |
| +checkDifficulty(): Boolean |
| R6: Add treasure to level | VideoGameManager | +menu(): void |
| +levelMenu(): String |
| +addTreasureToLevel(): boolean |
| VideoGameController | +levelsToString(): String |
| +treasuresToString(): String |
| +getLevels(): Level[] |
| +getTreasures(): Treasure[] |
| +addTreasureToLevel(): boolean |
| +updateLevelDifficulty(): boolean |
| +treasureHasCapacity(): boolean |
| Level | +addTreasure(): boolean |
| +treasuresFull(): boolean |
| +checkDifficulty(): boolean |
| R7: Change player’s points | VideoGameManager | +menu(): void |
| +playerMenu(): String |
| +updatePlayerPoints(): boolean |
| VideoGameController | +playersToString(): String |
| +getPlayers(): Player[] |
| Player | +setPoints(): void |
| +getName(): String |
| +getNickname(): String |
| +getPoints(): double |
| R8: Update player’s level | VideoGameManager | +menu(): void |
| +playerMenu(): String |
| +updatePlayerLevel(): boolean |
| VideoGameController | +playersToString(): String |
| +calculateMissingPoints(): double |
| +getPlayers(): Player[] |
| +updatePlayerLevel(): boolean |
| Player | +getLevel(): Level |
| +setLevel(): void |
| +getName(): String |
| +getNickname(): String |
| +getPoints(): int |
| Level | +getNumber(): int |
| R9: Generate treasures and enemies report | VideoGameManager | +menu(): void |
| +reportMenu(): String |
| +generalReport(): String |
| VideoGameController | +getLevels(): Level[] |
| +generateGeneralReport(): String |
| +levelsToString(): String |
| Level | +getEnemies(): Enemy[] |
| +getTreasures(): Treasure[] |
| Enemy | +getName(): String |
| +getType(): EnemyType |
| Treasure | +getName(): String |
| R10: Generate treasures type report | VideoGameManager | +menu(): void |
|  | +reportMenu(): void |
|  | +treasureTypeReport(): String |
| VideoGameController | +getLevels(): Level[] |
| +generateTreasureTypeReport(): String |
| Treasure | +getName(): String |
| R11: Generate enemies type report | VideoGameManager | +menu(): void |
| +reportMenu(): void |
| +enemyTypeReport(): String |
| VideoGameController | +getLevels(): Level[] |
| +generateEnemyTypeReport(): String |
| Enemy | +getName(): String |
| +getType(): EnemyType |
| R12: Generate most repeated treasure type report | VideoGameManager | +menu(): void |
| +reportMenu(): void |
| +treasureRepeatedReport(): String |
| VideoGameController | +getLevels(): Level[] |
| +generateRepeatedTreasureReport(): String |
| Level | +getTreasures(): Treasure[] |
| Treasure | +getName(): String |
| R13: Generate most powerful enemy report | VideoGameManager | +menu(): void |
| +reportMenu(): void |
| +enemyPowerfulReport(): String |
| VideoGameController | +getLevels(): Level[] |
| +generateenemyPowerfulReport(): String |
| Level | +getEnemies(): Enemy[] |
| Enemy | +getName(): String |
| +getType(): EnemyType |
| +getPointsPlayerWins(): int |
| R14: Inform the number of consonants found in the game’s enemies’ names | VideoGameManager | +menu(): void |
| +reportMenu(): void |
| +consonantsReport():String |
| VideoGameController | +getLevels(): Level[] |
| +generateConsonantsReport(): String |
| Level | +getEnemies(): Enemy[] |
| Enemy | +getName(): String |
| R15: Generate report of the top 5 players in the game | VideoGameManager | +menu(): void |
| +reportMenu(): void |
| +top5Report(): String |
| VideoGameController | +getPlayers(): Player[] |
| +orderPlayers(): Player[] |
| +generateTop5Report(): String |
| Player | +getName(): String |
| +getNickname(): String |
| +getPoints(): double |
|  |  |  |