**Algoritmos y Programación I**

**Tablas de Trazabilidad – Tarea Integradora II**

**Tabla de trazabilidad –Registrar jugador**

|  |  |  |
| --- | --- | --- |
| **Method** | **Operation** | **Classes** |
| executeOption() | Asks the user for the information needed. | Main |
| createPlayer() | Creates the player with their information. | Game, Player. |
| nickNameIsNotRepeated() | It searches for the nickname to see if it is not the same of another player | Game, Player. |

**Tabla de trazabilidad – Registrar un nivel**

|  |  |  |
| --- | --- | --- |
| **Method** | **Operation** | **Classes** |
| executeOption() | Asks the user for the information needed. | Main |
| createLevel() | Creates the ten levels, with their respective information. | Game, Level |

**Tabla de trazabilidad – Registrar tesoro a un nivel**

|  |  |  |
| --- | --- | --- |
| **Method** | **Operation** | **Classes** |
| executeOption() | Asks the user for the information needed. | Main |
| registerTreasureInLevel | Registers the treasure to the level it going to be. | Game, Level, Treasure. |

**Tabla de trazabilidad – Registrar enemigo a un nivel.**

|  |  |  |
| --- | --- | --- |
| **Method** | **Operation** | **Classes** |
| executeOption() | Asks the user for the information needed. | Main |
| addEnemyToLevel() | Registers in the system the enemy with their information. | Game, Level, Enemy |
| searchEnemyInLevel() | Searches if the enemy is already register in the level | Game, Level |

**Tabla de trazabilidad – Modificar el puntaje de un jugador**

|  |  |  |
| --- | --- | --- |
| **Method** | **Operation** | **Classes** |
| executeOption() | Asks the user for the information needed. | Main |
| playerScoreChange() | It changes the score of a player | Game, Player |
| scoreNotLower() | It verifies that the new score is not lower that the actual score that the player has. | Game, Player |

**Tabla de trazabilidad – Incrementar nivel para un jugador**

|  |  |  |
| --- | --- | --- |
| **Method** | **Operation** | **Classes** |
| executeOption() | Asks the user for the information needed. | Main |
| playerLevelUp() | In charge of increasing the player level according to the current score it holds. | Game, Level, Player. |
| checkPlayerScore() | It checks the player score to ensure that it is enough to change level. | Game, Player. |

**Tabla de trazabilidad – Informar los tesoros y enemigos**

|  |  |  |
| --- | --- | --- |
| **Method** | **Operation** | **Classes** |
| executeOption() | Asks the user for the information needed. | Main |
| treasuresAndEnemiesInLevel() | It informs all the treasures and enemies that are in a level. | Game, Level, Treasure, Enemy |

**Tabla de Trazabilidad – Informar la cantidad encontrada de un tesoro en todos los niveles.**

|  |  |  |
| --- | --- | --- |
| **Method** | **Operation** | **Classes** |
| executeOption() | Asks the user for the information needed. | Main |
| allTreasures() | Is in charge of displaying all the treasures that exist in the game. | Game, Treasure. |

**Tabla de trazabilidad – Informar la cantidad encontrada de un tipo de enemigos en todos los niveles.**

|  |  |  |
| --- | --- | --- |
| **Method** | **Operation** | **Classes** |
| executeOption() | Asks the user for the information needed. | Main |
| allEnemies() | Is in charge of displaying all the same enemies that exist in the game by their type. | Game,Enemy. |

T**abla de trazabilidad – Informar tesoro más repetido.**

|  |  |  |
| --- | --- | --- |
| **Method** | **Operation** | **Classes** |
| executeOption() | Asks the user for the information needed. | Main |
| treasureMostRepeated() | Displays the most repeated treasure in all levels. | Game, Level, Treasure. |

**Tabla de trazabilidad – Informar el enemigo que otorga mayor puntaje y el nivel donde se ubica**

|  |  |  |
| --- | --- | --- |
| **Method** | **Operation** | **Classes** |
| executeOption() | Asks the user for the information needed. | Main |
| enemyWithHighestScore() | Is in charge of displaying the enemy with most points and where is located. | Game, Level, Enemy. |

**Tabla de trazabilidad – Informar la cantidad de consonantes encontradas en los nombres de los enemigos.**

|  |  |  |
| --- | --- | --- |
| **Method** | **Operation** | **Classes** |
| executeOption() | Asks the user for the information needed. | Main |
| consonantsNamesEnemies() | Displays the consonants in the names of the enemies that are in the game. | Game, Level, Enemy. |
| searchConsonants() | It searches for each consonant in the enemy’s name. | Game, Enemy. |

**Tabla de trazabilidad – Informar el top 5 de los jugadores**

|  |  |  |
| --- | --- | --- |
| **Method** | **Operation** | **Classes** |
| executeOption() | Asks the user for the information needed. | Main |
| topFivePlayers() | Displays the five players with most score in the game. | Game, Level, Player. |