**TABLA DE ESPECIFICACIÓN DEL PROBLEMA DE INGENIERÍA DE SOFTWARE, identificando los siguientes elementos**

|  |  |
| --- | --- |
| CLIENTE | Video game company |
| USUARIO | Designer of the game |
| REQUERIMIENTOS FUNCIONALES | R1- Player registration.  R3-Generate level.  R4-Complexity of the level.  R5-Treasure register.  R6-Report the amount of treasure found in all levels.  R7- Registration of enemies.  R8- In a level the enemies cannot be repeated because once defeated, you would already know how to defeat the others of the same level.  R9-Register enemy to a level  R10-Search treasure at one level  R11-Modify a player's score.  R12-Increase level for a player, in case you cannot increase the level, you must inform the user what score is required to increase.  R13-Report the treasures and enemies (separated by commas) of a level given by the user  R14-Report the amount found of a type of enemy in all levels, that is, if the user wants to know how many ogres exist in all levels.  R15-Report the most repeated treasure in all levels.  R16-Inform the enemy that gives the highest score and the level where it is located.  R17-Report the number of consonants found in the names of the enemies in the game.  R18-Inform the top 5 of the players according to the score. |
| CONTEXTO DEL PROBLEMA | A video game company needs a system to be developed for a game that has 10 levels in which players will collect and fight enemies. They require a system that allows registering players, treasures, enemies, that the level generation be automatic, among other requirements |
| REQUERIMIENTOS NO FUNCIONALES | * Efficiency * Adaptability |

**Tabla de análisis de requerimientos funcionales (Nota: Una tabla por cada requerimiento funcional)**

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| --- | --- | --- | --- |
| Nombre o identificador | Register players | | |
| Resumen | The system must allow registering up to a total of 20 players | | |
| Entradas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| nickName | String | That the nickname is already in use |
| name | String | Does not apply |
| liveNumber | int | Does not apply |
| lvl | lvl | Does not apply |
|  |  |  |
| Actividades generales necesarias para obtener los resultados | That no more than 20 players have registered, enter a type of relevant data according to the requested characteristic and not repeat the same player | | |
| Resultado o postcondición | That the system has correctly registered the player | | |
| Salidas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| messageConfirm | String | Doesn’t apply |
| messageError | String | Doesn’t apply |
| nickName | String | Doesn’t apply |
| name | String | Doesn’t apply |
| score | int |  |
| liveNumber | int |  |
| lvl | int |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Nombre o identificador | Generate level | | |
| Resumen | The system must automatically generate 10 levels along with all its characteristics | | |
| Actividades generales necesarias para obtener los resultados | - | | |
| Resultado o postcondición | All 10 levels are generated | | |
| Salidas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| number | int | Must be unique |
| scoreLimit | Int | Doesn’t apply |
| enemyToDefeat | int | Must be at most 20 |
| treasureToObtained | int | Must be a most 50 |
| complexity | Complexity | If the points awarded by the treasures is greater than the points of the enemies, it is low level, if it is the same, it is medium, and if the points of the enemies are more than the points of the treasures, it is high |

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| --- | --- | --- | --- |
| Nombre o identificador | Register treasures | | |
| Resumen | The system must allow registering a maximum of 50 tresures for level | | |
| Entradas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| name | String | Doesn’t apply |
| url | String | Doesn’t apply |
| rewarScore | Int | Doesn’t apply |
| Actividades generales necesarias para obtener los resultados | The entered data must match the data type for the feature and the X and Y positions must be automatically generated | | |
| Resultado o postcondición | The treasure is successfully registered in the database | | |
| Salidas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| messageConfirm | String | Doesn’t apply |
| messageError | String | Doesn’t apply |
| name | String |  |
| url | String |  |
| rewarScore | int |  |
| positionX | Int |  |
| positionY | int |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Nombre o identificador | Report the amount found of a treasure in all levels. | | |
| Resumen | The system must report the amount of treasure found in all levels. | | |
| Actividades generales necesarias para obtener los resultados | Evaluate the name entered by the user with the previously registered treasurers | | |
| Resultado o postcondición | Show all registered treasures | | |
| Salidas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| treasure | Treasure | Doesn’t apply |

|  |  |  |  |
| --- | --- | --- | --- |
| Nombre o identificador | Register enemy | | |
| Resumen | The system must allow registering a maximum of 25 treasures for level | | |
| Entradas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| name | String | Doesn’t apply |
| scoreSubstraction | int |  |
| scoreAddition | Int |  |
| type | int |  |
|  |  |  |
| Actividades generales necesarias para obtener los resultados | The entered data must match the data type for the feature and the X and Y positions must be automatically generated | | |
| Resultado o postcondición | Enemy registered | | |
| Salidas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| messageConfirm | String | Doesn’t apply |
| messageError | String | Doesn’t apply |
| name | String |  |
| scoreSubstraction | int |  |
| ScoreAddition | int |  |
| type | EnemyType |  |
| positionX | int |  |
| positionY | int |  |