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

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| CLIENTE | Video game company |
| USUARIO | Gamers |
| REQUERIMIENTOS FUNCIONALES | R1) Player registration  R2) Level registration  R3) Treasures registration  R4) Enemies registration  R5) Modify a player’s score  R6) Increase the player’s level  R7) Report treasures and enemies  R8) Report the amount of treasure found in each level  R9) Report Enemy Type Encounter  R10) Report the most repeated treasure in all levels  R11) Inform the enemy that gives the highest score and the level where it is  R12) Report the number of consonants found in the names of enemies in the game  R13) Inform the top 5 of the players according to the score.  R14) Define the resolution |
| CONTEXTO DEL PROBLEMA | A company needs to create a game and it consists of ten levels in which the player must fight with monsters and collect treasures.  We have to analyze the requirements and provide a solution to the company through a class diagram and other tools. |
| REQUERIMIENTOS NO FUNCIONALES | RN1) Performance, the application should efficiently display the treasures and enemies of a level and in the web application it should not take more than two seconds.  RN2) Portability, the application must work on certain platforms or under certain conditions. |

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

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| --- | --- | --- | --- |
| Nombre o identificador | Player registration | | |
| Resumen | The system should allow players to register and collect certain data from them, from name to number of lives. | | |
| Entradas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| Nickname | String | The nickname cannot be repeated, for each player it must be different |
| Name | String |  |
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| Actividades generales necesarias para obtener los resultados | the user must enter the data correctly | | |
| Resultado o postcondición | If the user enters his data correctly, the system will send him a message on the screen that he has registered correctly. | | |
| Salidas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| Initial score | Int |  |
| Number of lives | Int |  |
| Message | String | The player must be created correctly |
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| Nombre o identificador | Level registration | | |
| Resumen | The system must register the different levels of the game. | | |
| Entradas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| Id | String |  |
| Points | Int | This entry needs the points obtained from the previous level to calculate how many points are necessary and be able to continue. |
| Treasures | String |  |
| Monsters | String |  |
|  |  |  |
| Actividades generales necesarias para obtener los resultados |  | | |
| Resultado o postcondición |  | | |
| Salidas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| Level of complexity | String |  |
| Points per enemy | Int |  |
| Points per treasures | Int |  |
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| --- | --- | --- | --- |
| Nombre o identificador | Treasures registration | | |
| Resumen | The system must allow to register treasures, which have the function of allowing the player to obtain points to win the level. | | |
| Entradas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| name | String | When entering the treasures into the game, the user will be asked how many treasures will be registered for the same level. |
| URL | String |  |
|  |  |  |
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| Actividades generales necesarias para obtener los resultados |  | | |
| Resultado o postcondición | When the user enters the necessary data for this requirement, treasures will be created in different positions of the level | | |
| Salidas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| ScorePerTreasure | Int |  |
| PositionX | Int | It depends of the resolution of the screen |
| PositionY | Int | It depends of the resolution of the screen |
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| --- | --- | --- | --- |
| Nombre o identificador | Enemies registration | | |
| Resumen | The system must allow monsters to be registered and these can lower the player's score. | | |
| Entradas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| Name | String | When entering the treasures into the game, the user will be asked how many treasures will be registered for the same level. |
| typeOfMonster | String |  |
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|  |  |  |
| Actividades generales necesarias para obtener los resultados | In a level the enemies cannot be repeated because once defeated, you would already know how to defeat the others of the same level. | | |
| Resultado o postcondición | When the user enters the necessary data for this requirement, monster will be created in different positions of the level | | |
| Salidas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| ScoreperMonster | Int |  |
| PositionX | Int | It depends of the resolution of the screen |
| PositionY | Int | It depends of the resolution of the screen |
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| --- | --- | --- | --- |
| Nombre o identificador | Modify a player’s score | | |
| Resumen | The system must allow monsters to be registered and these can lower the player's score. | | |
| Entradas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| Name | String | When entering the treasures into the game, the user will be asked how many treasures will be registered for the same level. |
| typeOfMonster | String |  |
| WinScore | Int |  |
| defeatScore | Int |  |
|  |  |  |
| Actividades generales necesarias para obtener los resultados | In a level the enemies cannot be repeated because once defeated, you would already know how to defeat the others of the same level. | | |
| Resultado o postcondición | When the user enters the necessary data for this requirement, monster will be created in different positions of the level | | |
| Salidas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
|  |  |
| PositionX | Int | It depends of the resolution of the screen |
| PositionY | Int | It depends of the resolution of the screen |
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