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

|  |  |
| --- | --- |
| CLIENT | Green SQA |
| USER | Employees: Service manager and collaborator |
| FUNCTIONAL REQUIREMENTS | R1: Project management  R2: Project stage management  R3: Culminate project stage  R4: Registration of knowledge capsules  R5: Approve capsules  R6: Capsule publication  R7: Other funtions |
| CONTEXT OF THE PROBLEM | A company called GreenSQA works with software quality assurance projects. It is made up of two types of employees: service managers and collaborators. The projects are divided into six stages: initiation, analysis, design, execution, closure, and monitoring and control. The stages are carried out at a specific moment of the project, therefore, they must have an identifier, a name and their start and end dates. Each of these stages is related to an associated personnel. At each stage, collaborators must create knowledge capsules, these can be of interest to the project or to the organization, it is mandatory that a string of keywords is included, whose marking will be by means of hashtags (#).  Likewise, whenever people belong to a certain project, they can see the capsules that are published in it. For the time being, only the organization’s capsules can be published, and their visibility is accessible to all employees. The system will be connected to a web page that will allow the manager to manage the information in an optimal way and to create reports about the projects. |
| NON-FUNCTIONAL REQUIREMENTS | * That the page must be secure and fast. * If the user does not register completely within a certain amount of time delete the data. * The system must be available when needed * The system must be compatible on other systems. |

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

| Name or identifier | R1: Project management | | |
| --- | --- | --- | --- |
| Summary | Once the project information is received and approved, it is important that it is saved and that there is assertive communication between managers to monitor the progress of the work. Once the data is entered it should be saved and during the pilot phase it should be able to save a maximum of ten projects. | | |
| Inputs | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| nameproject | String | Only the use of letters, no special characters or dots are allowed (maximum 30 letters). |
| clientName | String | Only the use of letters, no special characters or dots are allowed (maximum 30 letters). |
| startDate | date | dd/mm/yy  Only calendar type date is accepted |
| endDate | date | dd/mm/yy  Only calendar type date is accepted |
| budget | String | Only the use of letters, no special characters or dots are allowed (maximum 30 letters). |
| managerPhone | String | Only the use of letters, no special characters or dots are allowed (maximum 30 letters). |
| managerName | String | Only the use of letters, no special characters or dots are allowed (maximum 30 letters). |
| Result or postcondition | If the information is entered and the parameters established in them are met, they are saved in the database and a message is sent accepting the creation of the work profile. | | |
| Outputs | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| message | String | Project registration confirmation information, in case of error also reports it |

| Name or identifier | R2: Management of project stages | | |
| --- | --- | --- | --- |
| Summary | The program must receive the project information and create the six stages, which are: Start (which is the only stage that remains active), Analysis, Design, Execution, Closing and Monitoring and Control of the project, each stage has a start-finish date, actual and planned, and for these to be assigned, the number of months that each of the stages will take, must be requested to the user. | | |
| Inputs | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| months | int | Only whole numbers are allowed to be used to enter the months of duration of the stage. |
| startDatePlaneed | date | dd/mm/yy  Only calendar type date is accepted |
| endDatePlaneed | date | dd/mm/yy  Only calendar type date is accepted |
| startDateReal | date | dd/mm/yy  Only calendar type date is accepted |
| Resultado o postcondición | Se guarda la información de la etapa y las fechas, se muestra en una ventana emergente que manifiesta si es correcta o incorrecto el ingreso de datos y si lo es procede a mostrar la etapa activa | | |
| Outputs | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| message | String | Stage registration confirmation information, in case of error it also informs you of this information |

| Name or identifier | R3: Complete project stage | | |
| --- | --- | --- | --- |
| Summary | -Choose the option you wish to perform-  1. How many capsules are registered according to their type.  2. List of lessons learned according to the registered capsules  3. Inform the name of the project with more registration capsules.  4. Capsules registered in a project according to the name of a collaborator  5. Lessons learned by keyword (#)  with a menu we use these other functions that you can create and use with the above methods | | |
| Result or postcondition | Return the messages with the information or put true or false | | |
| Outputs | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| Message or boolean | String | Stage registration confirmation information, in case of error it also informs you of this information  False ot true |

| Name or identifier | R4: Registration of knowledge capsules | | |
| --- | --- | --- | --- |
| Summary | In the stages of the project different knowledge capsules are generated, each one of them has a unique identifier, a description using keywords beginning with "#", the type of capsule (Technical, Management, Domain and Experience), the name and position of the collaborator, and the lesson learned from the situation. | | |
| Inputs | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| id | String | combination of numbers and letters, must not contain spaces or special characters (maximum 8 characters) |
| type | enum | Enter the type of capsule (Technical, Management, Domain and Experiences). |
| description | String | You must enter what the capsule does and there must be at least one keyword starting with "#".  (maximum 300 characters) |
| nameEmployee | String | Only the use of letters, no special characters or dots are allowed (maximum 30 letters). |
| knowledgeCapsule | String | Only the use of letters, no special characters or dots are allowed (maximum 30 letters). |
| positionEmployee | String | The acquired knowledge must be entered, no special characters are allowed and it must have at least one keyword with "#". |
| Result or postcondition | The capsule is saved in the created stage and a message is displayed verifying whether the information was saved correctly and the new status of the capsule "under review". | | |
| Outputs | message | String | Confirmation information of capsule creation, also warns if it was not created. |

| Name or identifier | R5: Approve Capsules | | |
| --- | --- | --- | --- |
| Resumen | When the capsule is approved, the approval date will be recorded. | | |
| Inputs | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| status | enum | TO\_DEFINE, APPROVED, NOT\_APPROVED |
| lessonLearned | String | confirmation of lessons learned |
| Result or postcondition | El nuevo estado de la cápsula se guarda con su fecha de aprobación y se muestra un mensaje de que fue guardada | | |
| Outputs | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| message | String | confirmation of lessons learned |

| Name or identifier | R6: Publication of capsules | | |
| --- | --- | --- | --- |
| Summary | The capsules of organizational interest that are approved will be generated in HTML format to be published on the Organization's Intranet, for which the url will be stored. | | |
| Result or postcondition | If the capsule was approved the general program will display the url in HTML format | | |
| Outputs | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| message | String | Confirm sending url with HTML format and it is displayed |

| Name or identifier | R7: Other funtions | | |
| --- | --- | --- | --- |
| Summary | Las personas de la organización pueden acceder a las cápsulas de conocimiento mediante una cadena de búsqueda sobre los textos de las cápsulas o mediante los *“#”*. | | |
| Inputs | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| searchCapsule | String | Se deben ingresar las palabras claves con los “#” para buscar la cápsula, no se permiten números ni caracteres especiales |
| Result or postcondition | Se muestra la cápsula encontrada con la palabra clase si no existe habrá un mensaje de error | | |
| Outputs | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| searchResult | String | Muestra el resultado de la búsqueda gracias a las palabras claves |
| message error | String | Mensaje el cual manifiesta que no fue encontrado nada |