

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

CLIENTE	ReadX
USUARIO	Manager, user
REQUERIMIENTOS FUNCIONALES	<p>F1- Register User</p> <p>F2-Register Bibliographic Product</p> <p>F3- Modify Bibliographic Product</p> <p>F4- Delete Bibliographic Product</p> <p>F5- Buy a Bibliographic Product</p> <p>F6- Virtual library</p> <p>F7- Reading session</p>
CONTEXTO DEL PROBLEMA	<p>It is necessary to develop a prototype for the management of bibliographic products and users in a digital platform called ReadX. The prototype is required to allow the management of books and journals, to register, and to contemplate the future creation of other types of bibliographic products.</p> <p>The system needs to register 2 types of user: regular and premium, allowing the regular user to buy 5 books and subscribe to up to 2 magazines, and the premium user unlimited products as long as they can afford it.</p> <p>The system needs to generate an invoice, as well as update the number of copies sold or active subscriptions. In addition, a presentation of the library is required that allows the user to visualize its collection of bibliographic products, and that allows browsing in it.</p> <p>Finally, a simulation of a reading session should be presented that allows the user to read a page of the book or magazine, increasing the number of pages read of the product.</p>
REQUERIMIENTOS NO FUNCIONALES	<p>NF1-Security: The system must guarantee the privacy of user and product data.</p> <p>NF2-Usability: The system must be intuitive and easy to use for users.</p> <p>NF3: The system must be available at all times for</p>

	<p>users.</p> <p>NF4- Maintainability: The system must be easy to maintain and update if necessary</p>
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Tabla de análisis de requerimientos funcionales (Nota: Una tabla por cada requerimiento funcional)

Nombre o identificador	R1- Register User		
Resumen	The system must allow the registration of users with their respective data (name, ID and date of connection). There are 2 types of user, the premium and regular.		
Entradas	Nombre entrada	Tipo de dato	Condición de selección o repetición
	name	string	-
	id	string	-
	conectionDate	Calendar	1/1/1111
Resultado o postcondición	If the user is registered correctly, the system drops a message to inform the success. If the register fails, the system drops an error message.		
Salidas	Nombre entrada	Tipo de dato	Condición de selección o repetición
	mesagge	string	Successful operation or Failed operation

Nombre o identificador	R2- Register Bibliographic product		
Resumen	The system must allow the registration of books and magazines, with their respective attributes (unique identifier, name, number of pages, publication date, genre(Books)/category(Magazine), cover URL, sale/subscription value, number of copies/subscriptions, cumulative number of pages read).		
Entradas	Nombre entrada	Tipo de dato	Condición de selección o repetición
	id	string	hexadecimal or Alphanumeric
	name	string	-
	pages number	int	-
	publish date	Calendar	1/2/2022
	genre/Category	int	Depends of typeProduct
	typeProduct	int	1- Book 2-Magazine
	url	string	"magazine.com.co"
	value	double	\$0
Resultado o postcondición	The system registers the product, depending on the type it changes the values. If the operation was successful, it displays a success message, otherwise an error message.		
Salidas	Nombre entrada	Tipo de dato	Condición de selección o repetición
	message	string	Successful operation or Failed operation

Nombre o identificador	R3- Modify Bibliographic product		
Resumen	The system must allow the modification of books and magazines. To do this, the system must previously show the user a list of registered products, and let him decide which one they want to modify, in addition to inserting what hewant to change and the new value that replaces it.		
Entradas	Nombre entrada	Tipo de dato	Condición de selección o repetición
	productToEdit	int	-
	valueToModify	int	1-name 2-url 3...
	newInfo	string	-
Resultado o postcondición	The system replaces the old information registered with the new one and show a message of success or error		
Salidas	Nombre entrada	Tipo de dato	Condición de selección o repetición
	message	string	-

Nombre o identificador	R4- Delete Bibliographic product		
Resumen	The system must allow the elimination of books and magazines. To do this, the system must previously show the user a list of registered products, and let him decide which one they want to delete.		
Entradas	Nombre entrada	Tipo de dato	Condición de selección o repetición
	productToDelete	int	-
Resultado o postcondición	The system delete the product registered with the new one and show a message of success or error		
Salidas	Nombre entrada	Tipo de dato	Condición de selección o repetición
	message	string	-

Nombre o identificador	R5- Buy a Bibliographic product		
Resumen	The system must allow users to purchase books and subscribe to magazines, generating an invoice with the total value and the date, and updating the number of copies/subscriptions. To do this, the system must previously show the user a list of registered products, and let him decide which one they want to buy.		
Entradas	Nombre entrada	Tipo de dato	Condición de selección o repetición
	productToBuy	int	-
	date	Calendar	day/month/year
Resultado o postcondición	The system generates a bill with the value and the actual date, add the product to the client library and increments the sold books or subscription depending on the type of product		
Salidas	Nombre entrada	Tipo de dato	Condición de selección o repetición
	bill	string	-

Nombre o identificador	R6- Virtual library		
Resumen	The prototype should have a menu that allows the user to view their collection of bibliographic products, through a 5x5 matrix graphical interface. The products must be ordered by publication date, and the user will be allowed to browse their collection. In addition, the user will be able to select a bibliographic product through its coordinate in the matrix or its 3-character identifier to start a reading session.		
Entradas	Nombre entrada	Tipo de dato	Condición de selección o repetición
	product	int	ID or coordinate(x,y)
	back/next	char	A-previous page S-next page
Resultado o postcondición	The system generates a new reading session for the product that the user selected.		
Salidas	Nombre entrada	Tipo de dato	Condición de selección o repetición

Nombre o identificador	R7- Reading Session		
Resumen	<p>The system must allow users to carry out a reading session simulation, showing the name of the product, the current page and navigation options to go forward, back and return to the Library.</p> <p>In the case of regular users, advertisements must be presented at the beginning of the reading session and after every 20 pages read from a book or 5 pages read from a magazine.</p>		
Entradas	Nombre entrada	Tipo de dato	Condición de selección o repetición
	back/next/exit	char	A-previous page S-next page E-Exit
Resultado o postcondición	The system increments the number of reading pages of the products.		
Salidas	Nombre entrada	Tipo de dato	Condición de selección o repetición

Nombre o identificador	R8- Generate report		
Resumen	The system must allow to generate reports of total number of pages read on the entire platform,report the most read book genre and magazine category for the entire platform,Report the Top 5 books and the Top 5 most read magazines on the platform,report the number of books sold and the total value of sales,report the number of active subscriptions and the total value paid for subscriptions.		
Entradas	Nombre entrada	Tipo de dato	Condición de selección o repetición
	typeReport	int	report options
Resultado o postcondición	The system shows the report		
Salidas	Nombre entrada	Tipo de dato	Condición de selección o repetición
	msg	string	report