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

CLIENTE	ReadX
USUARIO	Manager, user
REQUERIMIENTOS FUNCIONALES	F1- Register User F2-Register Bibliographic Product F3- Modify Bibliographic Product F4- Delete Bibliographic Product F5- Buy a Bibliographic Product F6- Virtual library F7- Reading session
CONTEXTO DEL PROBLEMA	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. 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. 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. 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.
REQUERIMIENTOS NO FUNCIONALES	NF1-Security: The system must guarantee the privacy of user and product data.
	NF2-Usability: The system must be intuitive and easy to use for users.
	NF3: The system must be available at all times for

users.
NF4- Maintainability: The system must be easy to maintain and update if necessary

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.		
	Nombre entrada	Tipo de dato	Condición de selección o repetición
	name	string	-
Entradas	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

R2- Register Bibliographic product		
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).		
Nombre entrada	Tipo de dato	Condición de selección o repetición
d	string	hexadecimal or Alphanumeric
name	string	-
pages number	int	-
oublish date	Calendar	1/2/2022
genre/Category	int	Depends of typeProduct
ypeProduct	int	1- Book 2-Magazine
ırl	string	"magazine.com.co"
alue alue	double	\$0
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.		
Nombre entrada	Tipo de dato	Condición de selección o repetición
nessage	string	Successful operation or Failed operation
- 10 3 1 2 1 2 1 1 2 1 1 2 1 1 2 1 2 1 2 1 2	he system must allow their respective attribute ublication date, genre(leale/subscription value, umber of pages read). Nombre entrada dame ages number ublish date enre/Category ypeProduct rl alue he system registers the alues. I the operation was successed in error message. Nombre entrada	he system must allow the registration of books an eir respective attributes (unique identifier, name ublication date, genre(Books)/category(Magazin ale/subscription value, number of copies/subscription umber of pages read). Nombre entrada Tipo de dato string ame string ages number int ublish date Calendar enre/Category int rl string alue double he system registers the product, depending on the alues. The operation was successful, it displays a success of the error message. Nombre entrada Tipo de dato

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.		
	Nombre entrada	Tipo de dato	Condición de selección o repetición
	productToEdit	int	-
Entradas	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.		
	Nombre entrada	Tipo de dato	Condición de selección o repetición
e	productToDelete	int	-
Entradas			
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.		
	Nombre entrada	Tipo de dato	Condición de selección o repetición
	productToBuy	int	-
Entradas	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		
	Nombre entrada	Tipo de dato	Condición de selección o repetición
	bill	string	-
Salidas			

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.		
	Nombre entrada	Tipo de dato	Condición de selección o repetición
	product	int	ID or coordinate(x,y)
Entradas	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	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. 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.		
	Nombre entrada	Tipo de dato	Condición de selección o repetición
Entradas	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