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

CLIENT	Owner of RadX Company
USER	Anyone interested in owning a library of books and magazines.
FUNCTIONAL REQUIREMENTS	R1: Register users, regular and premium. R2: Manage bibliographic products: register books and journals. modify books and journals. Delete books and journals. R3: Automatically generate objects in the system for each type of user and bibliographic product. R4: Allow a user to buy a book or subscribe to a journal. R5: Allow a user to unsubscribe from a journal. R6: Allow the user to view his own library. R7. Allow a user to simulate a reading session (regular and premium). R8: Reports generated
CONTEXT OF THE PROBLEM	ReadX, an Egyptian conglomerate, hires several people to develop a software prototype to manage its publishing business worldwide. This business is based on the sale of two types of bibliographic products (books and magazines). The programmers must make this app enjoyable and have the functionalities that are in the functional requirements.
NON-FUNCTIONAL REQUIREMENTS	RN1: Usability: The application must be easy and comfortable to use for the user, with an intuitive and clear interface. RN2: Security: The application must be secure and protect the user's private information, such as payment information and personal data.

	RN3: Scalability: The application should be able to seamlessly handle a large number of clients and bibliographic products without affecting the quality of service. RN4: Availability: The application should be available all the time and be resistant to failures. RN5: Maintainability: The code must be easy to read, maintain and update as new functionality is added. RN6: Performance: The application must respond in a reasonable time as new products and users are added, and the functionalities used must be fast and efficient. RN8: Adaptability: The application should be adaptable to run on different devices and platforms.

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

Name or identifier	R1: Register users, regular and premium.		
Summary	In this requirement it is stated that there can be 2 users, one premium and one regular, the premium user can purchase any book and magazine he/she wants, the regular user can purchase 5 books, subscribe to up to 2 magazines and during his/her use of the platform.		
Input	Name of entry	Data type	Selection or repetition condition
	userType	int	enter number to know which user you want to be 1.Regular 2. Premium
	name	String	Type the user's name
	cc	String	Enter the user's identification number
	date	Calendar	Instantaneous date
Result or postcondition	Returns a message saying whether or not the user was created.		
Output	Name of entry	Data type	Selection or repetition condition
	message	String	"The user has been registered" or "The user can not be registered"

Name or identifier	R2: Manage bibliographic products: Modify books and journals		
Summary	I divided this requirement into 3 so that it would not be so long in terms of registering, modifying and deleting, for this you need all the data of the book or journal.		
Input	Name of entry	Data type	Selection or repetition condition
	idB (for book) idM (for magazine)	String	enter the book or magazine id
	nameBP (for book) namePB (For magazine)	String	Type the book or magazine name
	numPagesB (for book) numPagesM (for magazine)	int	enter the number of pages in the magazine or book
	dayB (for book) dayM (for magazine) monthB(for book) monthM (for magazine) yearB (for book) yearM (for magazine)	int	enter the day, month and year number of the date or magazine publication dd/mm/yy
	URLb (for book) URLm (for magazine)	String	the url of the book or magazine
	acumReadPagesB (for book) acumReadPagesM (for magazine)	int	enter the number of pages read
	reviewShort (only for book)	String	review for the book (max 100 words)
	genderIndex (for book) categoryIndex (for magazine)	int	for the book "Enter the genre (1. Science Fiction, 2. Fantasy, 3. Historical novel)" for magazine "Enter the category index (1. Varieties, 2. Design, 3. Scientific):"
	sellingValue (for book) valueSubscription (for magazine)	double	sales value of a book and subscription to a magazine
	emissionPeriod (for magazine)	String	period of issue of the magazine
	numCopies (for book) numSubscription (for magazine)	int	number of copies sold per book and number of subscribers
Result or postcondition	Return a message stating whether or not the book or magazine was created.		
Output	Name of entry	Data type	Selection or repetition condition
	message	String	"Book registered successfully", "Magazine registered successfully" or "The book could not be registered", "Error registering magazine"

Name or identifier	R2: Manage bibliographic products: Modify books and journals		
Summary	I divided this requirement into 3 so that it would not be so long in terms of registering, modifying and deleting, for this you need all the data of the book or journal.		
Input	Name of entry	Data type	Selection or repetition condition
	optionModify	int	according to the books which one you want to modify
	idBModify (for book) idMMModify (for magazine)	String	enter the book or magazine id
	nameBPModify (for book) namePBModify (For magazine)	String	Type the book or magazine name
	numPagesBModify (for book) numPagesMModify (for magazine)	int	enter the number of pages in the magazine or book
	dayBModify (for book) dayMModify (for magazine) monthBModify(for book) monthMModify (for magazine) yearBModify (for book) yearMModify (for magazine)	int	enter the day, month and year number of the date or magazine publication dd/mm/yy
	URLBModify (for book) URLMModify (for magazine)	String	the url of the book or magazine
	acumReadPagesBModify (for book) acumReadPagesMModify (for magazine)	int	enter the number of pages read
	reviewShortModify (only for book)	String	review for the book (max 100 words)
	genderIndexModify (for book) categoryIndexModify (for magazine)	int	for the book "Enter the genre (1. Science Fiction, 2. Fantasy, 3. Historical novel)" for magazine "Enter the category index (1. Varieties, 2. Design, 3. Scientific):"
	sellingValueModify (for book) valueSubscriptionModify (for magazine)	double	sales value of a book and subscription to a magazine
	emissionPeriodModify (for magazine)	String	period of issue of the magazine
	numCopiesModify (for book) numSubscriptionModify (for magazine)	int	number of copies sold per book and number of subscribers
Result or postcondition	Return a message stating whether or not the book or magazine was created.		
Output	Name of entry	Data type	Selection or repetition condition
	message	String	"Book modify successfully", "Magazine modify successfully" or "The book could not be modify", "Error modify magazine"

Name or identifier	R2: Manage bibliographic products: delete books and journals		
Summary	I divided this requirement into 3 so that it would not be so long in terms of registering, modifying and deleting, for this you need all the data of the book or journal.		
Input	Name of entry	Data type	Selection or repetition condition
	view	String	view the list of book or magazine
	idB (for book) idM (for magazine)	String	Enter the id of the book or magazine
	deleted	boolean	if the id corresponds, the book or magazine is deleted and if not, a message is sent.
Result or postcondition	Returns a message saying whether or not the user was created.		
Output	Name of entry	Data type	Selection or repetition condition
	message	String	"Book deleted successfully" or "Error deleting book"

Name or identifier	R3. Automatically generate objects in the system for each type of user and bibliographic product.		
Summary	This requirement shows the lists of the different users and bibliographic products by default.		
Result or postcondition	Returns the lists of users and bibliographic products that are available		
Output	Name of entry	Data type	Selection or repetition condition
	message	String	"list users" or "list bibliographic products"

Name or identifier	R4. Allow a user to purchase a book or subscribe to a journal.		
Summary	When users purchase a book or subscribe to a journal, an invoice should be generated and the number of copies sold or active subscriptions should be updated, depending on the type of bibliographic product.		
Input	Name of entry	Data type	Selection or repetition condition
	view	String	view the list of users
	view2	String	view the list of the products (book or magazine)
	ccUser	String	enter the id of the user
	name	String	Type the user's name
	ccUser	String	Enter the user's identification number
Result or postcondition	Return whether or not you were able to purchase the book		
Output	Name of entry	Data type	Selection or repetition condition
	message	String	"The user has been registered" or "The user can not be registered"

Name or identifier	R5. Allow the user to unsubscribe from a journal		
Summary	The user must be allowed to unsubscribe from any magazine.		
Input	Name of entry	Data type	Selection or repetition condition
	view	String	view the list of users
	view2	String	view the list of the products (book or magazine)
	ccUser	String	enter the id of the user
	idBP	String	Type the user's name
Result or postcondition	Return a message to say whether you unsubscribed or not		
Output	Name of entry	Data type	Selection or repetition condition
	message	String	"The unsubscription of the magazine was successful" or "An error occurred, the journal could not be deleted"

Name or identifier	R6 Allow the user to view his own bookstore		
Summary	The user should be allowed to view his product library in a matrix format.		
Input	Name of entry	Data type	Selection or repetition condition
	view	String	view the list of users
	view2	String	view the list of the products (book or magazine)
	ccUser	String	enter the id of the user
	idBP	String	Type the user's name
Result or postcondition	Return a message saying whether or not the library can be viewed		
Output	Name of entry	Data type	Selection or repetition condition
	message	String	"Library viewed successfully." or "Failed to view the library."

Name or identifier	R7. Allow a user to simulate a reading session (regular and premium).		
Summary	Users should be allowed to have a reading session by viewing the matrix.		
Input	Name of entry	Data type	Selection or repetition condition
	view	String	view the list of users
	view2	String	view the list of the products (book or magazine)
	ccUser	String	enter the id of the user
	row	int	Enter the row of matrix
	column	int	Enter de column of matrix
Result or postcondition	Returns a message saying whether or not the user was created.		
Output	Name of entry	Data type	Selection or repetition condition
	message	String	**show the book and pages**

Name or identifier	R8.Reports generated		
Summary	Users have the possibility to view the reports generated through the above.		
Input	Name of entry	Data type	Selection or repetition condition
	optionARP	String	option int for seleccioned for the reports
Result or postcondition	Returns a message showing or not showing what has been requested		
Output	Name of entry	Data type	Selection or repetition condition
	message	String	msg