

Software Requirements Specification for **Rinder**

(A place where you can find your suitable reading partner)

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Chapter 1

Introduction

Usually most of the students find it hard to find a suitable partner whom he/she can study with. In an open credit university it is even harder to find reading mates as the course mates change frequently every semester and most of the friends have different class schedules. If some of the problems could be solved in virtually this will decrease the sufferings for students and many more active on this field. "Rinder" is an App which is developed and designed to provide benefits to them.

1.1 Purpose

The purpose of this project is to make a one-stop solution for finding the desired reading or research partner, sell their own products, and also be a tutor. Rinder will allow people to search for their preferable reading partner quicker and more efficiently based on course, department, batch, and many more. Rinder is a university-based initiative. It will have a search by location option. But the location will only cover the university area. It will be available for all the students of that specific university. People with that university ID can sign up and use it further.

1.2 Intended Audience

- Developers
- Project Testers
- End Users

1.3 Intended Use

This Software Requirements document is intended for:

- **Developers:** Developers who can review a project's capabilities and more easily understand where their efforts should be targeted to improve or add more features to it.
- **Project Testers:** Projects testers can use this document as a base for their testing strategy as some bugs are easier to find using a requirements document.
- **End Users:** End users of this application who wish to read about what this project can do.

1.4 Product Scope

Rinder builds a partnership among students and the support they need to succeed. People with that university ID can sign up and use it further. Rinder will be helping students become supportive, communicative, confident and helpful towards fellow mates. Students will be able to know their department/batch/course mates even more by using Rinder.

Rinder is a very useful and time saving program for those who are in need of a suitable reading mate to study together. All you have to do is download it for free, install it and Registration for free.

- 1) Student's Information
- 2) Save and view the previous works and work count of an user.
- 4) Automatic Update : Support automatic software and security update.
- 5) Activity Log : Support log file creation to verify processing operations.
- 6) Optimized Versions : Available in android version.
- 7) Users can log in any time and any number of times and use the features.
- 8) All users will have unique id and password for logging on to the account's information .
- 9) The solution provides very simple and modified features which are very easy to view and operate various features.

1.5 Risk Definition

- For unstable network connection, searching by location and other features can be disrupted.
- Many server request is not controllable for the server.
- Too much user at a same time can cause server traffic.
- If the memory management is not handled properly in device, the app can crash.

Chapter 2

Overall Description

2.1 User Classes and Characteristics

This project is very powerful , easy to use . All users with some basic experience with mobile are able to use it efficiently .

Normal User : The normal users will have an account and can access the search option, shop and other features.

Software Developers : People with very good knowledge of programming language projects , in order to understand and be able to extend a project's source code .

Translators : People of all age groups with very good knowledge of a language not included in the current translation list .

2.2 User Needs

Our criteria are to let our user fulfill their various needs with a single registration. Our primary target is to find and get connected with other users as reading partners. But the users can also have the other privileges with the same account.

Other than our main objective of searching and getting connected with reading partners, some of the other user needs are

- Communicating with buyer/seller in shop option: The user can buy or sell their goods in the shop option. They can simply post for selling any product. Also, they can purchase the products that are already listed.
- Can contact and join as a tutor: Users can join as a tutor. After joining, their information will be listed on "find a tutor" option. Also, Users can find tutors for personal tuition.

And also our registered users can get online support by our chatbot service.

2.3 Operating Environment

Operating environment for the Rinder app help service is as listed below.

- Operating system: Android devices compatible with Android OS version 4.4 and further.
- Database: Firebase.
- Platform: Android Studio.

2.4 Constraints

- It is a challenge to complete the entire complex project in such a short time. Target dates for each step of the project must be taken care of, along with the final deadline. We must be careful of time management, scheduling meetings to divide the work equally in order to reach our goals.
- The UI design of this app will be designed in Adobe XD. We will be using XML format in android studio for front-end design.
- This application will be under the GNU General Public License Version 2, June 1991. Everyone that does or is going to develop or use this app, should agree and fully accept the terms of this kind of license.

2.5 Assumptions

1. It is assumed that the user is familiar with the basic mobile fundamentals.
2. Client/User has an active internet connection or has access to one to view the application.
3. Our application will not be violating any Internet Ethnic or Cultural Rules and won't be blocked by the Telecommunication companies.
4. The maintenance of the database will be assigned to the authorized person only.
5. Only authorized persons will be allowed inside the system.

Chapter 3

Requirements

3.1 Functional Requirements

1. As a user

I want to **REGISTER** to the app

So that I can create my account and access all the services.

Confirmation:

- User has to give personal information (name, date of birth, gender, contact number, university name, country, email)
- The user has to give a password and confirm the password.
- If the passwords do not match, registration won't be done
- Users can also login to their account using their Google account
- Without registration and login user cannot access any services

2. As a user

I want to **UPDATE/EDIT** profile

So that I can manage information about myself.

Confirmation:

- User can update information in their profile.
- User can upload their display picture.
- Users can turn off notifications from their profile.
- Users can delete their profile from the system

3. As a user

I want to **SEARCH** for study mates

So that I can find with them.

Confirmation:

- User has to access the search bar and type a suitable course/department/name for filtering.
- Without proper filtering, the user might not find the exact mates he/she wants.

4. As a user

I want to **ADD** my friend

So that I can get connected with them

Confirmation:

- User can add them in MY PARTNER segment
- Can share daily reading activity with them
- User can see their references

5. As a user

I want to **CHAT** with my mates

So that I can get to know them

Confirmation:

- User can communicate with other users easily.
- Can get information about their mates and discuss his/her current activity with others.
- Can share his/her thoughts about a topic.

6. As a user

I want to **JOIN** as a **TUTOR**

So that I can search for students

Confirmation:

- User can go for tutor mood in just one tap [There is no need for another login system since everyone is helping one another in study]
- If there is any help post regarding study a user can help other users as a tutor

7. As a user

I want to **FIND** a **TUTOR**

So that I can find a tutor

Confirmation:

- Users can search for tutors subject wise
- Can contact enlisted tutors

8. As a user

I want to **BUY/SELL** necessary goods (study materials)

So that I can find everything in one place

Confirmation:

- User can post for sell
- Can post for buy
- User can search for listed selling product
- Can add products to the cart
- Can review the buying products

9. As a user

I want to use **PAYMENT GATEWAY**

So that I can pay for my shopping.

Confirmation:

- User has to buy something from the shop.
- User has to use a payment gateway method to pay for the goods he/she bought.
- User has to give proper information of his account to the chosen payment method.
- Without accessing the payment gateway he/she cannot buy from the shop.

10. As a user

I want **SUPPORT** from the system

So that I can know about the application and how it works.

Confirmation:

- User has to open the chatbot window and ask questions.
- User can choose basic FAQ related questions that are already listed.
- User can acquire some basic knowledge and information by communicating in chatbot service.

3.2 Non Functional Requirements

Performance Requirements

- This system must be fit according to the performance wise . It should use less memory and will be easily accessible by the user . Memory management should be done wisely so that none of the memory part goes wasted.
- The system shall respond to the member in not less than two seconds from the time of the request submit . The system shall be allowed to take more time when doing large processing jobs . Responses to view information shall take no longer than 2 seconds to appear on the screen.
- Furthermore , the user is able to check for new versions of the program just by clicking a button . In this way Rinder will be always up-to-date with all new supported features and bug fixes.

Safety Requirements

- System use shall not cause any harm to human users.
- It will not break any political and government rule.

- We respect your privacy and are committed to protecting your personal data.
- Backup , recovery and business continuity should ensure adequate backup of data as may be required by their operations . Rinder should also have well documented and tested business continuity plans that address all aspects of Study support.
- Data should be backed up periodically.
- An off site backup is necessary for recovery from major failures / disasters to ensure business continuity.

Security Requirements

- Unauthorised access to the system and its data is not allowed .
- Ensure the integrity of the system from accidental or malicious damage.
- System use secured database.
- Account ID and password (PIN) protection.
- Sign-off Button.
- Failed Login Attempts.

Software Quality Attributes

- We are concerned with system failures .
- The Quality of the system is such a way so that it can be very user friendly to users .
- The system cares about modifiable quality to change.
- The performance quality is concerned with response times and similar measures for various events.
- The quality of this system is care about fast speed , compatibility.
- This is also secured , accurate and hence reliable.