

FIRST PROJECT SUBMISSION

PARCHE LECTOR

Presentado por:
Nicolas Arciniegas
Juan Jose Alvarez Lozano
Julian Dario Colmenares Saenz
Julian Santiago Becerra Pulido
Sebastian Castañeda Garcia

Profesor:
Carlos Andres Sierra Virguez

Domingo 26 de Octubre



Universidad Nacional de Colombia
Departamento de Ingeniería de sistemas
2025

Requirements Documentation

Functional requirements

1. User Accounts & Authentication

- The system must allow users to **create accounts** using email/password or third-party providers (e.g., Google, Apple).
 - The system must allow users to **log in/out securely**.
 - The system must allow users to **reset their password** via email.
 - The system must store and validate authentication tokens securely.
-

2. User Profile Management

- Users must be able to **view and edit their profile** (bio, photo, preferences, favorite genres).
 - Users must be able to **see their activity** (reviews, readlists, stats).
-

3. Book Management

- The system must allow users to **search for books** by title, author, ISBN, or keywords.
 - The system must allow **filtering search results** by genre, author, year, list, or rating.
 - The system must display **book details** (title, cover, description, author, publication year, average rating, reviews).
-

4. Library & Readlists

- Users must be able to **add books to personal collections** such as “Read,” “Currently Reading,” and “Want to Read.”
- Users must be able to **create, rename, and delete custom readlists**.
- Users must be able to **add or remove books** from readlists.

- Users must be able to **mark books as favorites**.
-

5. Reviews & Ratings

- Users must be able to **write, edit, and delete reviews** for books they've read.
 - Each review must support **text and a star rating** (e.g., 1–5).
 - Users must be able to **view others' reviews** on a book's detail page.
 - The system must **aggregate ratings** to show average ratings per book.
-

6. Social & Community

- Users must be able to **follow/unfollow** other users and authors.
 - Users must have a **feed** showing recent activity (reviews, lists, ratings) from people they follow.
 - Users must be able to **like or comment** on reviews or lists (optional in v1).
 - The system must allow users to **view other users' public lists and profiles**.
 - The system must **recommend users or authors** based on shared interests.
-

7. Statistics & Analytics

- The system must generate **reading statistics** (e.g., number of books read, pages read, average rating, most read genres).
 - Statistics should be **updated automatically** as users log books.
 - Users must be able to **view statistics by time period** (monthly, yearly, lifetime).
-

8. Search & Discovery

- The system must support **global search** (books, users, authors, lists).
- The system must provide **filter and sort options** (e.g., highest rated, most popular, newest).

Non-Functional Requirements

1. Performance

- Search results should be returned within **2 seconds** for typical queries.
 - Page loads (after login) should take **no longer than 3 seconds**.
-

2. Scalability

- The system architecture should support **horizontal scaling** to accommodate growing traffic.
-

3. Security

- All user data must be **transmitted over HTTPS**.
 - Passwords must be **hashed and salted** using industry standards (e.g., bcrypt).
 - Authentication tokens must **expire and refresh** securely.
 - Sensitive operations (e.g., profile edit, password reset) require **authenticated sessions**.
-

4. Usability & Accessibility

- Users should be able to **navigate the main features in ≤3 clicks** from the home screen.
-

5. Maintainability

- Codebase should follow **modular architecture** (clean modular design).
 - The system should have **automated testing** (unit, integration, and end-to-end).
 - The app should support **continuous integration and deployment (CI/CD)**.
-

6. Localization

- The app must support **multiple languages** (e.g., English, Spanish) with a **translation system** for UI text.
-

7. Privacy & Data Protection

- Users must be able to **delete their account and personal data** upon request.
 - No personal data should be shared with third parties without consent.
-

8. Compatibility

- The app should support **modern browsers** (Chrome, Firefox, Safari, Edge).

User stories

Sign Up / Log In

Story 1: Sign up with email or Google

As a new user, I want to sign up with email or Google **so I can create an account and start using the app.**

Acceptance Criteria

- **Given** the user is on the sign-up page,
When they enter valid email and password,
Then a new account is created and the user is logged in.
 - **Given** the user selects "Sign up with Google,"
When they authorize via Google,
Then their account is created using their Google credentials and they are redirected to the main dashboard.
-

Story 2: Log in securely

As a user, I want to log in securely with my credentials **so I can access my personal library and data.**

Acceptance Criteria

- **Given** the user is on the login page,
When they enter valid credentials,
Then they are successfully logged in and redirected to their library.
 - **Given** invalid credentials are entered,
When they try to log in,
Then the system displays an error message: "Invalid email or password."
-

Story 3: Reset password

As a user, I want to reset my password if I forget it **so I can regain access to my account easily.**

Acceptance Criteria

- **Given** the user is on the login page,
When they click “Forgot Password” and enter their email,
Then the system sends a password reset link to the user’s email.
 - **Given** the user clicks the reset link,
When they enter a new password,
Then the password is updated and the user can log in with it.
-

Story 4: Log in with social accounts

As a user, I want to log in with Apple or social accounts **so I can access the app faster without remembering another password.**

Acceptance Criteria

- **Given** the user chooses a social login option,
When they authenticate successfully,
Then they are redirected to the app and their account is linked to that social profile.
-

Discover Books

Story 5: Search books

As a reader, I want to search for books by title or author **so I can quickly find the books I’m interested in.**

Acceptance Criteria

- **Given** the user enters a title or author name,
When they click “Search,”
Then matching books are displayed in a results list.
 - **Given** no matches are found,
Then the system displays “No results found.”
-

Story 6: Filter results

As a reader, I want to filter results by genre, year, or rating **so I can narrow down my search to what fits my taste.**

Acceptance Criteria

- **Given** the user has performed a search,
When they select one or more filters,
Then the results update to show only matching books.
-

Story 7: View book details

As a reader, I want to view book details (cover, description, rating) **so I can decide whether I want to read it.**

Acceptance Criteria

- **Given** the user selects a book from the results,
When the book page loads,
Then the system shows the book cover, title, author, description, and average rating.
-

Manage Library

Story 8: Mark book status

As a reader, I want to mark books as “Read,” “Currently Reading,” or “Want to Read” **so I can keep track of my reading status.**

Acceptance Criteria

- **Given** the user is viewing a book,
When they choose a status,
Then the book appears in the corresponding list in their library.
-

Story 9: Create custom readlists

As a reader, I want to create custom readlists (e.g., “Favorites,” “2025 Reads”) **so I can organize my books in a personalized way.**

Acceptance Criteria

- **Given** the user opens their library,
When they click “Create List” and enter a name,

Then a new list appears in their account.

Story 10: Add or remove books

As a reader, I want to add or remove books from lists **so I can keep my library up to date**.

Acceptance Criteria

- **Given** the user views a book,
When they click "Add to List,"
Then the book is added to that list.
 - **Given** the book is already in the list,
When they click "Remove,"
Then it disappears from that list.
-

Review & Rate

Story 11: Add review and rating

As a reader, I want to add a review and rate books I've read **so I can share my opinions with others**.

Acceptance Criteria

- **Given** the user is on a book's detail page,
When they submit a review and select a rating,
Then the review appears under the book's review section with their username.
-

Story 12: View reviews

As a reader, I want to view others' reviews and ratings **so I can see what people think before reading a book**.

Acceptance Criteria

- **Given** the user opens a book page,
Then the system displays a list of reviews and average rating.

Social & Community

Story 13: Follow users or authors

As a reader, I want to follow other users or authors **so I can stay updated on what they're reading**.

Acceptance Criteria

- **Given** the user views another user's profile,
When they click "Follow,"
Then that user is added to their following list.
 - **Given** they click "Unfollow,"
Then the user is removed.
-

Story 14: See activity feed

As a reader, I want to see what others are reading or reviewing in a feed **so I can discover new books through my community**.

Acceptance Criteria

- **Given** the user opens their home feed,
Then they see recent activity from the users they follow (reviews, ratings, new books added).
-

Track Progress

Story 15: View basic stats

As a reader, I want to see basic stats (books read, pages read) **so I can track my reading progress**.

Acceptance Criteria

- **Given** the user opens the "Stats" section,
Then they see total books read and total pages read calculated automatically.

Profile & Preferences

Story 16: Edit profile info

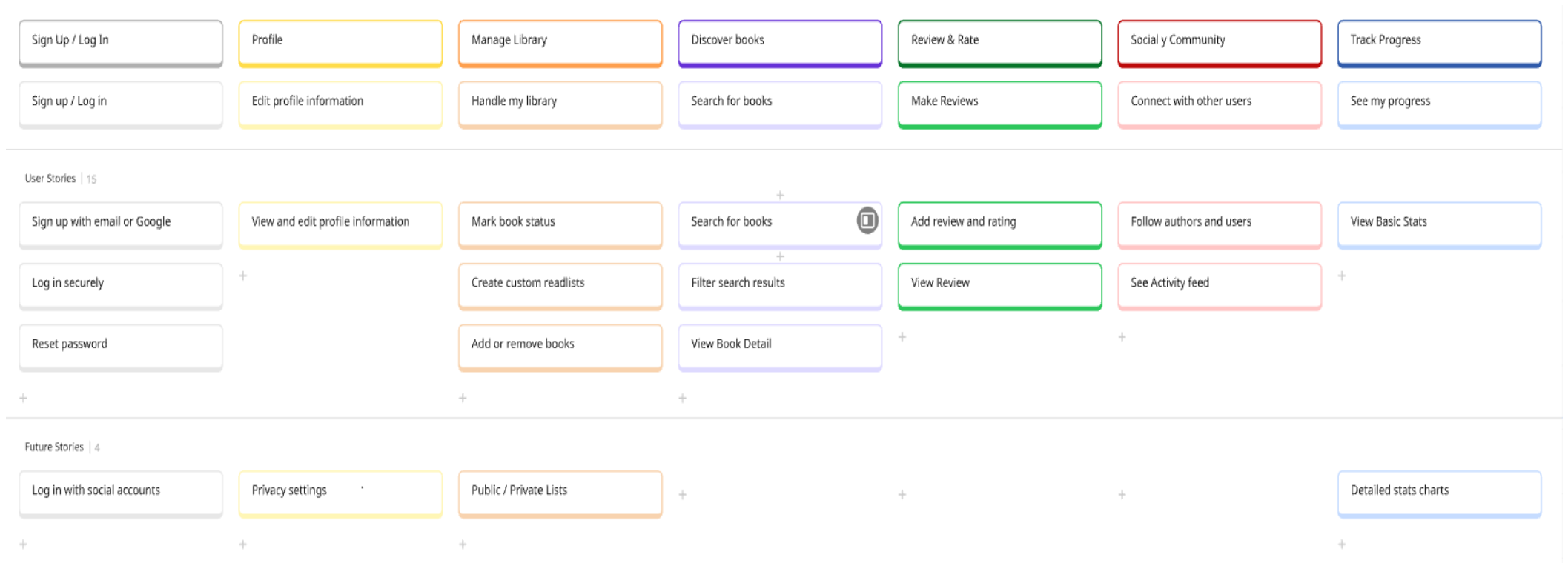
As a user, I want to edit my profile info (photo, bio, genres) **so I can personalize my reading experience**.

Acceptance Criteria

- **Given** the user is on their profile page,
When they click “Edit” and save changes,
Then the new info is displayed immediately.

User Story Mapping

https://miro.com/welcomeonboard/VHd6T09kcytPMmFHazluTGgxNEY5Tk1PeHikLzIGRIBDVmFpOENVTNwNHRXMHg1ZUVzaHNFSEZpNFZXaXNSem5zOGhZUjdYaEV2bCtDODJ0eHByV2t6cmJtS1FIUVZ6U0VPMmZFelgrTEgxTTJIUkhRc21ERjlr3dkOFhMd1NNakdSWkpBejJWRjJhRnhhb1UwcS9BPT0hdjE=?share_link_id=728683372109



Bibliography

Umaña Acosta, H. R., Aponte Melo, J. H., & Olarte Mesa, L. M. (2025). *Planeación del Release y del Sprint* [Diapositivas de clase]. Universidad Nacional de Colombia.

Umaña Acosta, H. R., Aponte Melo, J. H., & Olarte Mesa, L. M. (2025). *Generación de Historias de Usuario* [Diapositivas de clase]. Universidad Nacional de Colombia.