# E-book library management system

1. **System Overview**

System type: Web-based E-Book Library Management System.

Main user roles: Admin

Publisher

Reader

2. User Roles and Permissions

## 2.1 Admin

Admin කෙනාට තියෙන main responsibilities:

- User management:

- Publishers / Readers registration requests view & approve/reject.

- User accounts activate/deactivate, update basic info.

- Subscription management:

- Subscription packages (monthly/yearly) create/update (price, duration, description).

- Reader payment history, active/inactive subscriptions view.

- E-book management:

- All e-books list view (including publisher, status, publish date).

- Inappropriate content review & block/unpublish if needed.

- System configuration:

- General settings (logo, name, contact info, terms & conditions).

- Reports & analytics (total users, active readers, revenue summaries, top publishers/books).

## 2.2 Publisher

Publisher කෙනා verified උනාට පස්සේ:

- Profile:

- Personal/organization details update (name, bio, logo, contact).

- E-book management:

- New e-book upload (title, author, description, category, language, price = 0 or included in subscription, cover image, file link (Drive link)).

- Own e-books edit/update (metadata, file replace).

- Own e-books publish/unpublish.

- Own e-books stats view (views, reads, favorites, ratings – if implemented).

- Reading: As a user, පොත් කියවන්න ද පුළුවන් (same as Reader).


## 2.3 Reader

Reader userට:

- Registration & profile:

- Account create, login, password reset.

- Profile details update.

- Subscription:

  ➢ Package select (monthly Rs. 500 / yearly Rs. 5000).
  ➢ Online payment (assume payment gateway integration – Pay Hear).
  ➢ Subscription status view (active, expiry date, payment history).

- E-book usage:

  ➢ E-book catalog browse/search/filter.
  ➢ E-books read online (web reader).
  ➢ Books add to favorites / reading list (optional feature).

- Restrictions:

  ➢ Subscription active නැත්නම් paid library content read කරන්න බැහැ (only maybe free sample / preview).

## 3. Subscription Model Requirements

- Package types:

  - Monthly subscription:
  - Fee: Rs. 500.
  - Validity: 30 days (or 1 month) from payment date.
  - Yearly subscription:
  - Fee: Rs. 5000 (Rs. 1000 discount vs $12 \times 500$).
  - Validity: 365 days (or 12 months) from payment date.

- Behavior:

  - System එකට subscription expiry auto-calculate වෙන්න ඕන.
  - Subscription expired වුනාම, Readerට new payment කරන්න prompt කරන්න.
  - Multiple renewals history maintain කරන්න.
  - Future scope (inform developers):
  - Auto-renewal (recurring payments) support.
  - Pro-rated upgrade/downgrade monthly $\leftrightarrow$ yearly.

## 4. Authentication and Authorization (Registration and Login)

- Authentication:

  - Email-based registration + password.
  - Email verification (optional but recommended).
  - Password reset via email.

- Authorization (RBAC – Role Based Access Control):

  - Each user account එකට assigned role: Admin / Publisher / Reader.
  - Permissions strictly controlled by role (no direct permission per user).
  - Middleware/filters check role before accessing each module (Admin panel, Publisher dashboard, Reader dashboard).