

Functional Specification

Project Name

Serialized Publishing Platform

Architecture Assumptions

Frontend: React JS Backend: Node JS Database: MySQL 8 Payments: Stripe Connect
Email: External provider via API Social: Meta Graph API, X API Auth: Magic link +
optional password for authors

1. Core Principles

1. All reading content is free
 2. Monetization is voluntary reader contributions only
 3. Platform takes a fixed monthly minimum fee per author
 4. No fee carryover if monthly minimum is met
 5. Author payouts only after platform obligations are satisfied
 6. Authors own audience relationships
 7. Platform supports literary novels not genre serialization only
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2. User Roles

Reader Author Moderator Admin

3. Authentication

3.1 Magic Link Authentication

Readers authenticate using magic links only.

Flow 1 Reader enters email 2 One-time link emailed 3 Link valid 15 minutes 4 On click, session created

No password required for readers.

Authors may optionally enable password login in addition.

Security

- Token single-use
- Token hashed at rest
- Rate limits enforced

Tables

magic_link_tokens id email token_hash expires_at used_at created_at

4. Author Profiles

Fields

Display name Bio short Bio long Avatar Banner Website Social links Genres Featured books

Features

- Follow author
 - Recommend other authors
 - View contribution support button
 - Public follower count optional
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5. Books and Novels

Book Structure

Book → Parts optional → Chapters → Subchapters optional

Strict reading order enforced by default.

Book Metadata

Title Logline Synopsis Genre Language Cover image Book trailer video URL Comments mode Downloads enabled flag

Book Page

- Trailer video
 - Table of contents
 - Read button
 - Follow book
 - Support author
 - Bookseller links
-

6. Chapter Publishing

Editor

Rich text Images Anchors for inline comments Autosave Versioning

Scheduling

Per book syndication plan Manual or scheduled Timezone aware

7. Reading Experience

- Sequential navigation
- Remember last read location
- TOC navigation
- Responsive design
- Accessibility controls

8. Comments and Critiques

Comment Types

General comment Praise Question Suggestion Line edit

Scope

- Chapter level • Inline anchored

Controls

- Author moderation • Rate limits • Report abuse
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9. Following and Notifications

Follow Targets

Author Book

Notifications

New chapter Replies Mentions Announcements

Channels In-app Email optional

10. Recommendations

Author Recommendations

Authors can recommend other authors Displayed on profiles and books

Reader Lists

Readers can create public reading lists

11. Reader Contributions

Contribution Model

Voluntary support Fixed amounts only 2 USD 5 USD 9 USD

No content gating.

Payment Flow

Stripe Payment Intent Apple Pay and Google Pay enabled where available

Contribution Targets

Author default Optional book attribution

Tables

contributions id payer_user_id nullable author_id book_id nullable amount_cents status created_at

12. Platform Fee Model

Monthly Minimum Fee

Minimum platform fee per author per month: 2 USD

Rules

- Platform collects up to 2 USD per month per author
- If 2 USD is met in a month, no liability
- If less than 2 USD collected, shortfall becomes liability
- Liability carries forward
- Future contributions first pay liability
- Payouts blocked while liability > 0

Allocation Order

1 Pay down existing liability
2 Collect current month minimum fee
3 Remaining funds go to author balance

Month End Job

If $\text{fee_collected_this_month} < 2$ $\text{liability} += (2 - \text{fee_collected_this_month})$

Reset monthly fee counter.

13. Author Payouts

Requirements

- Stripe Connect account
- liability = 0
- author_balance >= payout threshold

Threshold

Configurable default 100 USD

Tables

authors_financials author_id liability_cents fee_collected_this_month
author_balance_cents

payouts id author_id amount_cents status created_at

14. EPUB Downloads

Optional per book.

- Generate EPUB3 • On demand or scheduled • Anonymous download allowed
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15. Bookseller Links

Supported

Amazon Apple Books Kobo Google Play Barnes and Noble

Display

Buttons on book page Tracked outbound clicks

16. Email Integration

Purpose

Notify followers Send advice posts Author owned audience

Providers

Mailchimp ConvertKit SES

Features

- Import contacts • Segment audiences • Campaign scheduling • Webhook unsubscribe sync
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17. Social Syndication

Networks

Instagram Facebook X

Capabilities

- Auto post on chapter publish • Custom templates per book • Image and quote card generation

Limitations

IG links non clickable X API requires paid tier

18. Search and Discovery

- Full text search • Genre filters • Featured lists • Following feed
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19. Moderation

- Comment reporting • Content takedown • User bans • Audit logs
-

20. API Overview

Auth Books Chapters Comments Follows Contributions Finance Email Social Admin

REST JSON over HTTPS.

21. Background Jobs

- Monthly fee reconciliation • Scheduled publishing • Email sends • Social posting • EPUB generation

Queue: BullMQ or equivalent.

22. Acceptance Criteria Summary

- ✓ Literary novels supported ✓ Chapter and subchapter structure ✓ Free reading ✓ Magic link auth ✓ Inline critiques ✓ Author profiles ✓ Video per book ✓ Follower notifications ✓ Author recommendations ✓ Fixed voluntary contributions ✓ Monthly minimum fee no carryover if met ✓ Liability only when unmet ✓ EPUB optional ✓ Bookseller links ✓ Email and social integration

Functional Specification Extension

Content Types: Poetry, Short Fiction, Audiobooks

23. Content Type System

Supported Content Types

- Novel • Short Fiction • Poetry • Audiobook

Each content item is typed but shares common infrastructure: profiles, follows, comments, contributions, notifications.

Core Rule

All content types are first-class and free to read or listen.

24. Poetry

Poetry Object Model

Poem • Standalone unit • Optional grouping into Collections or Sequences

Poem Metadata

Title Subtitle optional Author Form optional (free verse, sonnet, haiku, etc.) Tags Language Trigger warnings optional Draft or published state

Poetry Collections

Optional container for related poems.

Collection • Title • Description • Order enforced or free • Collection landing page

Reading Experience

- Single-page presentation • Line-preserving typography • Optional line numbers for critique • Dark and light modes

Comments and Critique

- Inline comments at line level • Poem-level comments • Critique mode toggle per poem • Same comment types as prose

Publishing and Syndication

- Poems can be scheduled • Collections can notify followers on update • Syndication cadence per collection or poem

Discovery

- Browse by form • Browse by tag • Featured poems • Latest poems feed
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25. Short Fiction

Short Fiction Definition

A complete narrative intended to be read in one sitting.

Length Rules

- No structural requirement for chapters • Optional scene breaks

Object Model

ShortStory • Single content body • Treated as atomic unit

Metadata

Title Synopsis Word count auto-calculated Genre Tags Language

Reading Experience

- Single continuous page • Progress indicator optional • Inline comments supported

Collections

Short fiction can be grouped into:

- Anthologies • Themed collections

Collections behave similarly to poetry collections.

26. Audiobooks

Audiobook Structure

Audiobook → Parts optional → Chapters → Audio segments

Each chapter maps to one or more audio files.

Metadata

Title Narrator Duration Language Cover image Trailer audio optional Bookseller links
(Audible etc.)

Audio Hosting

- Audio files stored in object storage • Streaming via signed URLs • Adaptive bitrate optional

Player Requirements

- Web audio player • Speed control • Skip forward/back • Remember playback position • Resume across devices

Accessibility

- Transcripts optional • Chapter navigation • Keyboard controls

Comments

- Chapter-level comments • Timestamped comments optional
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27. Unified Author Dashboard Updates

Authors can manage:

- Novels • Poetry • Short fiction • Audiobooks

Dashboard filters by content type.

Each item shows:

- Status
- Followers
- Contributions attributed
- Engagement metrics

28. Contributions Attribution Logic

Reader contributions can optionally be attributed to:

- Author only
- Specific book
- Specific poem
- Specific short story
- Specific audiobook

Attribution affects analytics only. All funds flow through the same fee and liability logic.

29. Search and Discovery Expansion

Search filters now include:

- Content type
- Form (poetry)
- Length (short fiction)
- Audio duration

Discovery feeds:

- Latest poems
- New short fiction
- New audiobooks
- Mixed following feed

30. API Extensions

Content Creation

POST /api/poems
POST /api/poetry-collections
POST /api/short-fiction
POST /api/audiobooks

Reading and Listening

GET /api/poems/:id
GET /api/short-fiction/:id
GET /api/audiobooks/:id
GET /api/audiobooks/:id/stream

Comments

Unified comments endpoint supports content_type parameter.

31. Database Extensions

New Tables

poems id author_id title content_html form tags status published_at
poetry_collections id author_id title description
poetry_collection_items collection_id poem_id order_index
short_stories id author_id title content_html word_count genre status published_at
audiobooks id author_id title narrator cover_url duration_seconds
audiobook_chapters id audiobook_id title order_index audio_url duration_seconds

comments add content_type enum novel_chapter poem short_story audiobook_chapter
content_id

32. Notifications

Trigger notifications on:

- New poem
- New short story
- New audiobook chapter
- New collection release

User can opt in per content type.

33. Acceptance Criteria Additions

- ✓ Poetry with line-level critique
- ✓ Short fiction single-sitting reading
- ✓ Audiobook streaming with chapter navigation
- ✓ Unified contributions model
- ✓ No paywalls
- ✓ Same fee and liability logic
- ✓ Same syndication and notification infrastructure

End of Extended Specification