

Software Requirements Specification (SRS)

Project Title: FastPrintGuys - Self-Publishing & Print-On-Demand Platform

Prepared By: Fuzail Qureshi

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1. Introduction

1.1 Purpose

This Software Requirements Specification (SRS) defines the functional and non-functional requirements for the development of "FastPrintGuys" — a self-publishing and print-on-demand web platform. The system provides tools for authors, publishers, and businesses to design, publish, and distribute printed books globally with complete in-house printing and shipping support.

1.2 Scope

The system allows:

- Book creation through file uploads and design tools
- Pricing, tax, and shipping cost calculation
- Ordering and payment processing
- Real-time order tracking and management
- Admin interface for management of users, orders, pricing, and integrations
- External API access for B2B order submission

Out-of-scope:

- eBook publishing
- Third-party printing services

1.3 Technologies

- **Frontend:** React.js, Tailwind CSS
 - **Backend:** Django REST Framework
 - **Database:** MySQL (XAMPP)
 - **Authentication:** Firebase/Auth0
 - **Storage:** AWS S3
 - **Payments:** Stripe, PayPal
 - **Shipping:** EASYSHIP API
 - **Hosting:** AWS or Vercel
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2. Overall Description

2.1 Product Perspective

The system is a standalone SaaS platform providing book publishing features with in-house production capabilities and B2B API support.

2.2 User Classes and Characteristics

- **Guest:** Can browse bookstore.
- **Registered User (Author):** Can upload, preview, and order books.
- **Admin:** Manages users, projects, orders, and pricing.
- **B2B Partner:** Submits orders via external API.

2.3 Assumptions and Dependencies

- Stripe/PayPal APIs are functional
 - EASYSHIP APIs accessible for real-time shipping
 - Internet connection for user access
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3. Functional Requirements

Module 1: User Registration & Authentication

- Email and Google registration
- Email verification
- Password reset

Module 2: Book Creation Workflow

- Upload interior and cover files
- Select book specs (trim size, binding, interior, cover)
- Live 3D preview (via PDF.js/WebGL)
- Store as Draft or Project

Module 3: Pricing & Tax Calculation

- Dynamic container for pricing breakdown
- Quantity-based discounts
- Promo code support
- Real-time tax and shipping fee calculation via ZIP
- Real-time cost update using React state

Module 4: Checkout & Payment

- Stripe/PayPal integration
- Order creation on payment confirmation
- Invoice and order confirmation via email

Module 5: Shipping and Fulfillment

- EASYSHIP integration
- Shipment tracking
- Email + dashboard updates

Module 6: Admin Panel

- View/manage orders and users
- Update statuses and tracking info
- Export data
- Push projects to production queue
- Manage pricing and tax rules

Module 7: Pricing & Tax Engine

- Define pricing templates based on book specs
- Import/export pricing via Excel
- Tax rules by ZIP/state/country

Module 8: API for External Integration

- B2B order submission via token-authenticated REST API
- Order sync, tracking updates

Module 9: Bookstore & Printshop (Phase 2)

- Bookstore UI with retail profit calculator
- Partner-managed printshops integration

4. Non-Functional Requirements

- Responsive UI (Tailwind CSS)
 - Secure authentication and file storage
 - PCI-DSS compliance for payments
 - GDPR/CCPA compliance
 - Performance target: load pages <2s
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5. Database Design (MySQL)

5.1 Tables Overview

users

Column Name	Type	Description
id	INT (PK)	Unique user ID
name	VARCHAR	Full name
email	VARCHAR	Email (unique)
password	VARCHAR	Hashed password
is_admin	BOOLEAN	User role flag
created_at	DATETIME	Timestamp

books

Column Name	Type	Description
id	INT (PK)	Unique book ID
user_id	INT (FK)	Creator ID
title	VARCHAR	Book title
category	VARCHAR	Book category
language	VARCHAR	Language
trim_size	VARCHAR	Book size
page_count	INT	Number of pages
binding_type	VARCHAR	Paperback/Hardcover etc.
interior_type	VARCHAR	B&W/Color
paper_type	VARCHAR	Paper quality
cover_finish	VARCHAR	Matte/Gloss
interior_file	TEXT	S3 URL
cover_file	TEXT	S3 URL
status	VARCHAR	Draft/Submitted/Approved
price_per_unit	FLOAT	System-calculated

Column Name	Type	Description
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created_at	DATETIME	Timestamp
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orders

Column Name	Type	Description
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id	INT (PK)	Unique order ID
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user_id	INT (FK)	Customer
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book_id	INT (FK)	Book
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quantity	INT	No. of copies
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total_price	FLOAT	Including tax and shipping
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discount	FLOAT	Applied discount
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promo_code	VARCHAR	Applied code
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shipping_address	TEXT	Full address
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tracking_number	VARCHAR	Courier tracking
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order_status	VARCHAR	Pending/Shipped/In Prod
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created_at	DATETIME	Timestamp
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promo_codes

Column Name	Type	Description
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id	INT (PK)	Unique ID
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code	VARCHAR	Promo code string
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discount_percent	INT	Percentage
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created_by	INT (FK)	Admin ID
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valid_until	DATE	Expiry date
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shipping_rates

Column Name	Type	Description
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id	INT (PK)	ID
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region	VARCHAR	Country/state
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courier	VARCHAR	FedEx/UPS
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Column Name	Type	Description
rate_per_kg	FLOAT	Per kg rate
flat_rate	FLOAT	Optional

6. System Flow Overview

User Flow:

1. Register/Login
2. Upload and configure book
3. Preview and store project
4. Get dynamic cost in real-time (pricing + shipping)
5. Checkout with Stripe/PayPal
6. Admin receives order and files
7. Order moves to production queue
8. After printing, order is marked shipped
9. User receives tracking updates

Admin Flow:

1. Login
 2. View projects & orders
 3. Approve books, update prices
 4. Add promos and shipping rules
 5. Generate print job sheets
 6. Manage B2B API requests
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7. Future Enhancements

- Phase 2: Bookstore with retail pricing and profit calculator
 - Phase 2: External printshops integration
 - Mobile app version (React Native)
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8. Appendix

- Sample trim sizes: 4.25x6.875, 5x8, 6x9, 8.5x11

- Book preview: PDF.js with Three.js integration
- Cover spec templates (to be shared)

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