**ThisPDF.com**  
PDF-sharing platform

(Documentation)

**MicroServices + Tech-Stack:**

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| **Microservice** | **Purpose** | **Tech Stack** | **Port** |
| Auth Service | User registration, login, authorization tokens | Node.js + JWT | 3001 |
| User Profile Service | Manage user profile, avatars | Node.js + PostgreSQL | 3002 |
| Upload Service | PDF upload, virus scan, metadata extract | Flask + ClamAV | 3003 |
| Storage Service | Store/retrieve PDFs from cloud | MinIO | 3004 |
| Viewer Service | In-browser PDF rendering & preview | Node.js + PDF.js | 3005 |
| Search Service | Full-text & tag-based search | Meilisearch | 3006 |
| Comments Service | Comments, likes, replies | Node.js + MongoDB | 3007 |
| Analytics Service | Track views, likes/dislikes, minutes read | Kafka + ClickHouse | 3008 |
| Notification Service | Comments alert, in-app alerts | Node.js + Redis | 3009 |
| Global Chat Service | Real-time chat with blue horn (highlight message) and gold horn pinned message | Node.js + Socket.IO + Redis + MongoDB | 3010 |
| Friend Service | Friend request & friend list | Node.js + MongoDB | 3011 |
| API Gateway | Route external/internal traffic | NGINX | 3012 |
| React Frontend | | | 3000 |

**Supporting Technologies:**

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| **Component** | **Tech** |
| Backend | Node.js, Flask |
| Frontend | React.js |
| Backend | PostgreSQL, MongoDB |
| Authentication | JWT |
| Message Queue | Kafka, Redis |
| Object Storage | MinIO |
| PDF Rendering | PDF.js |
| Realtime Layer | Socket.IO with Redis Adapter |
| Admin Panel | AdminJS |

**Core Features:**

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| --- | --- |
| **Feature** | **Purpose** |
| **PDF Uploads** | * Upload public or private files * Private PDFs visible only to friends * Metadata extraction and category assignment |
| **Friend System** | * Friend requests (accept/reject/unfriend) * Private PDFs visible only to friends |
| **Global Chat (with Horn System)** | * Blue Horn: Highlight message (5 every day) * Gold Horn: Pinned message (1 per week) |
| **Comments** | * Comment on PDFs or users * Like/Dislikes * Reply Comments |
| **Favorites & Ratings** | * Favorite a PDF or a user * 1–5 star ratings * Feed of favorite content |
| **Categorization & Tagging** | * PDF tags for search indexing * Categories and subcategories (e.g. “Science > Physics”) |