

Business Requirement Document (BRD)

Project Title: SmartPDF – Rethinking Learning, One Document at a Time

Author: Shivam Yadav Date: 23 June 2025

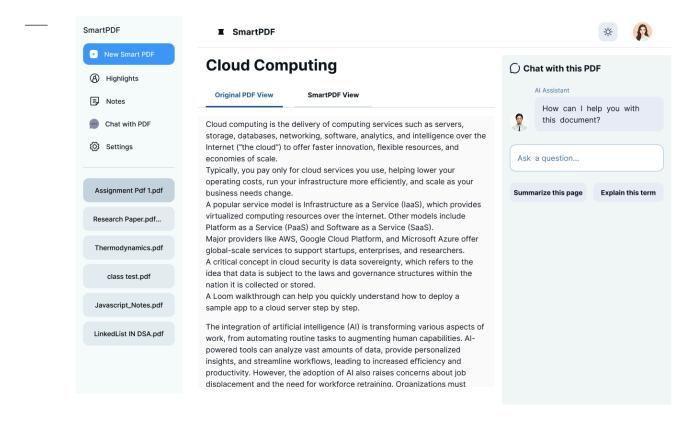
1. Executive Summary - The "Why"

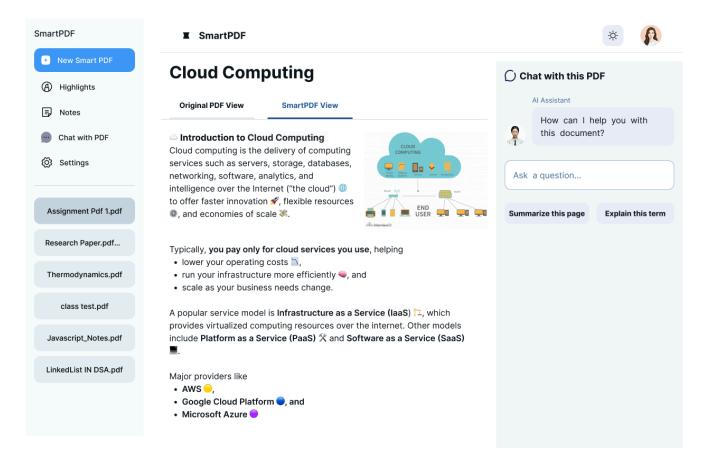
In today's information-rich world, students, teachers, and professionals rely heavily on PDFs for content delivery — assignments, study notes, corporate documents, and research papers. However, PDFs are a 30-year-old format that lacks interactivity, personalization, and contextual understanding.

This leads to:

- Cognitive overload from dense, raw text
- Frequent tab-switching to search terms or references, disrupting flow
- Linear learning, limiting curiosity-driven exploration

SmartPDF is a web app that transforms static PDFs into **interactive**, **curiosity-driven learning experiences**. It enhances comprehension by enabling **inline explanations**, **image embeds**, **smart typography**, and a unique **thread-based learning flow** — all without leaving the document.





2. Goals and Objectives

Goal	Description
lmprove comprehension	Help users understand difficult content through instant popups and simplified summaries
Enable exploration	Allow users to select terms and explore deeper via Al-powered inline search
○ Eliminate distractions	Keep users in a flow state with no need to switch tabs or search elsewhere
Enhance readability	Use visual structure, hierarchy, and spacing to increase content clarity
Rethink learning	Promote a new way of engaging with documents — deeper, smarter, and user-driven

3. Problem Statement

"Learning through PDFs is broken. They're hard to read, harder to understand, and worst of all — they disrupt natural curiosity and exploration."

Users often get stuck on unfamiliar terms or ideas. They open a new tab, search Google, lose context, and rarely come back to where they left off. This hinders deep learning.

SmartPDF aims to solve this by creating a **zero-distraction**, **immersive learning experience** from traditional documents.

4. Scope (MVP)

Included in MVP:

- PDF upload and conversion to smart web-view
- Highlighted key terms with in-place pop-up explanations
- User text selection → "Search" → Inline Al answer popups
- Embedded images for selected concepts
- Readability-enhanced layout with better typography and structure

Out of Scope (for MVP):

- Real-time collaboration or annotations
- Offline SDF viewer (future feature)
- Voice-based learning
- Full document editing/export features

5. Target Users

User Segment

Use Case

Students

Understanding class notes, assignments, textbooks better

👰 Teachers

Making educational material more accessible and engaging

Exploring new topics deeply and intuitively

6. Success Metrics (Post MVP)

- Time spent per document: Avg. > 2.5 minutes
- Popup interactions per user: Avg. > 5 per session
- Retention: 30% returning users within 7 days
- Completion rate: >60% of users finish full SmartPDF view

7. Future Vision (Optional Appendix for Internship)

- Downloadable .sdf (Smart Document Format) files with built-in definitions, links, and layout works offline
- Dedicated SmartPDF viewer extension or desktop/mobile app
- Integration with LMS platforms (like Moodle, Google Classroom)
- Crowdsourced glossary, media, and community features

"In the future, PDFs will not be just files. They will be learning journeys — personalized, intelligent, and designed for flow."

Just imagine if you get this same document in this type of format :-

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User Segment	Use Case
Students	Understanding class notes, assignments, textbooks better
Teachers	Making educational material more accessible and engaging
Professionals	Grasping technical or policy documents more quickly
Self-learners	Exploring new topics deeply and intuitively

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