



Business Requirement Document (BRD)

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

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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.

The screenshot displays the SmartPDF web application interface. On the left, a sidebar contains a 'SmartPDF' header, a 'New Smart PDF' button, and a list of features: Highlights, Notes, Chat with PDF, and Settings. Below these are several PDF document thumbnails, including 'Assignment Pdf 1.pdf', 'Research Paper.pdf...', 'Thermodynamics.pdf', 'class test.pdf', 'Javascript_Notes.pdf', and 'LinkedList IN DSA.pdf'. The main content area shows a document titled 'Cloud Computing' with two tabs: 'Original PDF View' and 'SmartPDF View'. The 'SmartPDF View' is active, displaying text about cloud computing with interactive elements like highlights and a chat interface. On the right, a 'Chat with this PDF' panel is visible, featuring an 'AI Assistant' icon, a text input field for asking questions, and buttons for 'Summarize this page' and 'Explain this term'.

SmartPDF

New Smart PDF

Highlights

Notes

Chat with PDF

Settings

Assignment Pdf 1.pdf

Research Paper.pdf...

Thermodynamics.pdf

class test.pdf

Javascript_Notes.pdf

LinkedList IN DSA.pdf

SmartPDF

Cloud Computing

Original PDF ViewSmartPDF View

Introduction to Cloud Computing

Cloud computing is the delivery of computing services such as servers, storage, databases, networking, software, analytics, and intelligence over the Internet ("the cloud") to offer faster innovation, flexible resources, and economies of scale.

Typically, **you pay only for cloud services you use**, helping

- lower your operating costs,
- run your infrastructure more efficiently, and
- scale as your business needs change.

A popular service model is **Infrastructure as a Service (IaaS)**, which provides virtualized computing resources over the internet. Other models include **Platform as a Service (PaaS)** and **Software as a Service (SaaS)**.

Major providers like

- AWS,
- Google Cloud Platform, and
- Microsoft Azure

Chat with this PDF

AI Assistant






How can I help you with this document?

Ask a question...

Summarize this page

Explain this term

2. Goals and Objectives

Goal	Description
 Improve comprehension	Help users understand difficult content through instant popups and simplified summaries
 Enable exploration	Allow users to select terms and explore deeper via AI-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 AI 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





 **Professionals**

Grasping technical or policy documents more quickly

 **Self-learners**

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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