



Study Buddy

AI-Powered Learning Assistant



Intelligent



Innovative



Educational

Transforming How Students Learn



The Challenge

Students struggle with information overload from lengthy documents,
lack personalized study materials, and need
efficient ways to
create summaries, flashcards, and study plans
from their resources.



Our Solution

Study Buddy leverages AI and RAG technology to automatically
transform uploaded documents into
personalized study materials,
providing intelligent tutoring and adaptive
learning experiences.

Powerful Features



Document Upload

Upload and view PDF documents with intelligent processing



Smart Summaries

AI-generated beautiful summaries from your documents



Flashcards

Interactive flashcards for effective memorization



Q&A Generation

Automated questions and answers for revision



Study Slides

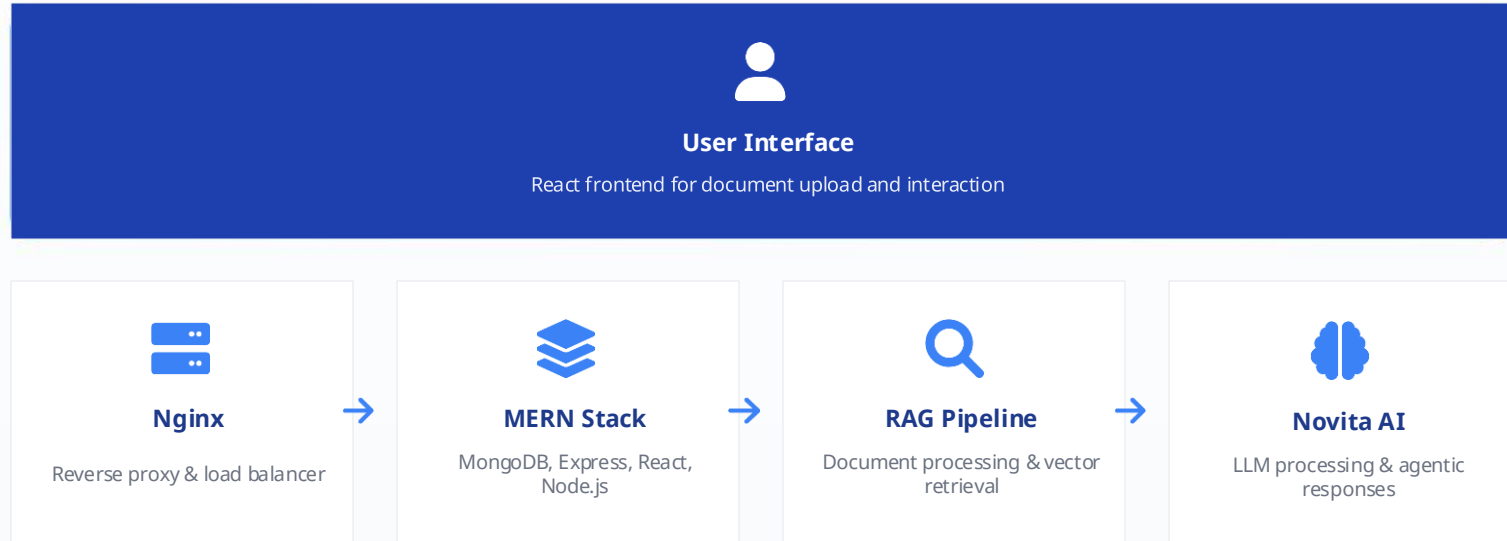
Professional presentation slides from your content



Study Plans

Personalized study plans with milestones

System Architecture



Intelligent Tutoring



**AI-powered chatbot
tutor**



**Answers based on uploaded
documents**



**Agentic AI for personalized
responses**



**Interactive learning
conversations**



**Contextual educational
guidance**

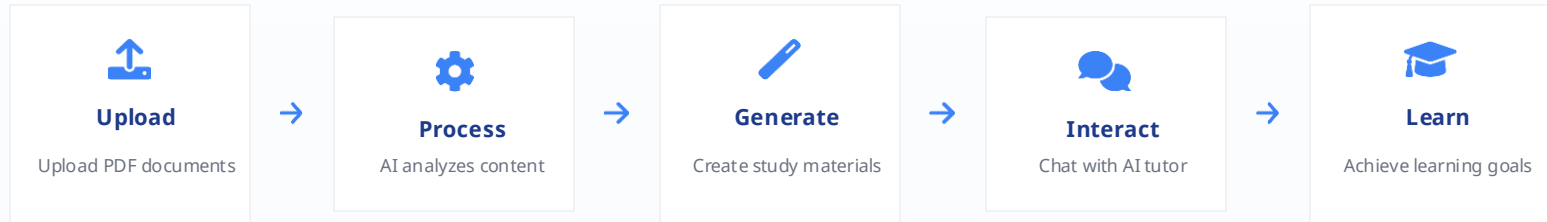


"How can I help you understand this concept better?"

"Let me explain based on your uploaded materials..."

"Would you like me to create practice questions?"

Seamless User Experience



Powered by Trae IDE



 **AI-powered code development**

 **Intelligent code enhancement**

 **Rapid prototyping capabilities**

 **Collaborative development environment**

 **Automated code optimization**



```
// AI-assisted development
const studyBuddy = new AIApp({
  features: ['RAG', 'Chatbot',
'Analysis']
});
```

```
// Enhanced with Trae IDE
studyBuddy.enhance()
  .optimize()
  .deploy();
```

Accelerated development with AI-powered assistance

Scalable Deployment



Cloud Infrastructure

- ✓ AWS cloud hosting for reliability
- ✓ Auto-scaling capabilities
- ✓ Global content delivery
- ✓ High availability architecture



Production Stack

- ✓ Nginx reverse proxy & load balancer
- ✓ PM2 process management
- ✓ MongoDB cluster deployment
- ✓ SSL/TLS security encryption

Future Vision



Lecture Upload

Support for video lecture uploads with automatic transcription and content extraction



YouTube Integration

Extract educational content directly from YouTube videos for study material generation



Collaborative Learning

Building features for group study sessions and peer-to-peer learning experiences



Analytics & Insights

Providing detailed learning analytics and progress tracking for students and educators