AI Knowledge Companion - Test Document

*This is a test document for the AI Knowledge Companion application.*

# Introduction

The AI Knowledge Companion is a sophisticated platform that combines artificial intelligence with knowledge management. This document serves as a test file for validating the DOCX parsing capabilities using LangChain's DocxLoader.

# Features

* Document Upload: Support for multiple file formats including PDF, TXT, MD, DOC, and DOCX
* RAG System: Retrieval-Augmented Generation for intelligent responses
* Vector Search: Using pgvector for semantic similarity search
* OpenAI Integration: Text embeddings and GPT-4o-mini for conversations
* Tutor Management: Create and manage AI tutors with custom knowledge bases

# Technical Details

The system uses several key technologies:

1. 1. Next.js 15 for the frontend framework
2. 2. Supabase for backend and database
3. 3. LangChain for document processing
4. 4. OpenAI for embeddings and chat completions
5. 5. TypeScript for type safety

# Document Processing Pipeline

When a document is uploaded, it goes through the following steps:

* File validation and type detection
* Text extraction using appropriate parser (WebPDFLoader for PDF, DocxLoader for Word documents)
* Text chunking with RecursiveCharacterTextSplitter (1000 characters, 120 overlap)
* Embedding generation using OpenAI text-embedding-3-small model
* Storage in Supabase with pgvector for similarity search

# Conclusion

This test document contains enough varied content to properly test the DOCX parsing, chunking, and embedding generation process. The content includes headers, lists, technical terms, and multiple paragraphs to ensure comprehensive testing.

**End of Test Document**