"""

Custom exceptions for the RAG pipeline.

This module defines specific exceptions for different error scenarios

in the pipeline, enabling better error handling and debugging.

"""

class RAGPipelineError(Exception):

"""Base exception for all RAG pipeline errors."""

pass

class DataLoadingError(RAGPipelineError):

"""Raised when there's an error loading documents."""

pass

class PDFProcessingError(DataLoadingError):

"""Raised when there's an error processing PDF files."""

pass

class ChunkingError(RAGPipelineError):

"""Raised when there's an error during text chunking."""

pass

class EmbeddingError(RAGPipelineError):

"""Raised when there's an error generating embeddings."""

pass

class VectorStoreError(RAGPipelineError):

"""Raised when there's an error with vector store operations."""

pass

class RetrievalError(RAGPipelineError):

"""Raised when there's an error during retrieval."""

pass

class LLMError(RAGPipelineError):

"""Raised when there's an error with LLM operations."""

pass

class EvaluationError(RAGPipelineError):

"""Raised when there's an error during evaluation."""

pass

class ConfigurationError(RAGPipelineError):

"""Raised when there's a configuration error."""

pass

class APIKeyError(ConfigurationError):

"""Raised when API keys are missing or invalid."""

pass