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(57) Abstract :
Disclosed herein is an automated NLP-based question and answer generation system from documents (100) comprises a frontend interface (102) configured to enable a user to upload one or more documents. The system also includes a backend unit (104) configured to orchestrate processing workflows, manage user requests, and interface with NLP modules. The system also includes a document processing engine (106), configured to extract textual content from diverse file formats. The system also includes a tokenization module (108), adapted to preprocess the extracted text for computational efficiency and structured segmentation. The system also includes an NLP-based question generation and answer extraction module (110), configured to generate contextually relevant questions and extract corresponding answers. The system also includes a semantic search and retrieval module (112), configured to store, index, and retrieve document embeddings. The system also includes a summarization module (114), adapted to generate concise summaries of the uploaded documents.

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