StreamlitApp

+main()
+home_page()
+text_analysis_page()
+url_analysis_page()
+history_page()
+statistics_page()

TextAnalyzer

+analyze_text(text: str) : dict
+get_basic_stats(text: str) : dict
+detect_language(text: str) : str
+analyze_sentiment(text: str) : dict
+calculate_readability(text: str) : dict
+analyze_word_frequency(text: str) : dict
+analyze_sentences(text: str) : dict
+analyze_characters(text: str) : dict

URLAnalyzer

+extract_text_from_url(url: str) : dict
+validate_url(url: str) : bool
+scrape_webpage(url: str) : str
+clean_html_content(html: str) : str

DatabaseManager

+init_database()
+save_analysis_result(data: dict) : bool
+get_all_results() : list
+search_results(query: str) : list
+delete_result(result_id: int) : bool
+export_to_csv() : str
+export_to_txt() : str
+get_statistics() : dict

ANALYSIS_RESULTS

int	id	PK
text	text_content	
text	file_name	
text	url	
text	language	
float	sentiment_score	
float	subjectivity_score	
float	readability_score	
int	char_count	
int	word_count	
int	sentence_count	
int	paragraph_count	
text	word_frequency	
text	sentence_lengths	
text	char_frequency	
datetime	timestamp	

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generates
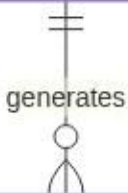
EXPORT_HISTORY

int	id	PK
int	analysis_id	FK
text	export_type	
text	file_path	
datetime	export_time	