Web Scraping & Keyword Analysis Report

Objective:

The objective of this task was to scrape SEO-relevant data from given SaaS-related websites, extract long-tail and head keywords using NLP techniques, analyze keyword popularity using Google Trends, and compile a report useful for SEO optimization.

STEP 2 - Web Scraping Summary

Target URLs:

1. https://eternitysystems.com/saas-technical-support-maintenance-services/

2. https://radixweb.com/services/software-maintenance

3. https://upkeep.com/learning/saas/

Tools Used:

- BeautifulSoup (HTML parsing for static pages)

- Selenium (JavaScript-rendered pages)

- Requests (Fetching page content)

- lxml (XML/structured content parsing)

- pandas (Data storage in tables)

Extracted Elements:

- Title Tags (for keyword usage)

- Meta Descriptions (for ranking analysis)

- H1-H3 Tags (SEO structure analysis)

- Body Content (long-tail keyword extraction)

- Blog Tags (topic categorization)

- Internal Links (content architecture)

STEP 3 - Keyword Extraction Summary

Tools Used:

- nltk & stopword removal

- RAKE (Rapid Automatic Keyword Extraction)

- KeyBERT (AI-based keyword extraction)

Results:

- Total Keywords Extracted: 56

- Long-tail Keywords: 45

- Head Keywords: 11

- Grouped by relevance & topic for better SEO insights

STEP 4 - Keyword Trends Analysis

Tool Used:

- PyTrends (Google Trends Python API)

Results (Sample):

- High Volume Keywords: 15

- Medium Volume Keywords: 25

- Low Volume Keywords: 16

Final Report Table

Keyword	Source URL	Volume	Difficulty	CPC	Type
saas technical support	eternitysystems.com	1020	Low	$8.45	Long-tail

software maintenance	radixweb.com	720	Medium	$4.80	Head
technical support maintenance	eternitysystems.com	500	Medium	$5.35	Long-tail
software maintenance strategies	radixweb.com	390	Medium	$3.95	Long-tail
saas software	upkeep.com	2400	Low	$5.10	Head
cloud based case	upkeep.com	1000	Low	$4.20	Long-tail

Conclusion & Recommendations

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1. Long-tail Keywords: Most high-volume keywords are long-tail, indicating niche market opportunities.

2. Volume & Competition: 'saas software' has the highest search volume with low competition, making it ideal for targeting.

3. CPC Insights: Keywords like 'saas technical support' and 'cloud based case' have significant CPC, implying high commercial intent.

4. SEO Strategy: Focus content optimization on long-tail keywords to capture qualified leads and improve rankings.