



# SYSTEM DESIGN DOCUMENT

**PREPARED FOR**

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# CRC Cards

Crawler		Query		Server	
Responsibilities	Collaborators	Responsibilities	Collaborators	Responsibilities	Collaborators
<ul style="list-style-type: none"><li>• Validate URLS</li><li>• Follow Policies for crawling (robots.txt)</li><li>• Crawl the website</li><li>• Index and save crawled data in database</li></ul>	<ul style="list-style-type: none"><li>• Server</li><li>• Database</li></ul>	<ul style="list-style-type: none"><li>• Search the database for matching query</li></ul>	<ul style="list-style-type: none"><li>• Server</li></ul>	<ul style="list-style-type: none"><li>• Handle HTTP requests to crawl the web and search the database</li><li>• Process responses and return valid JSON</li></ul>	<ul style="list-style-type: none"><li>• Crawler</li><li>• Query</li><li>• Frontend</li></ul>

  

Database		Frontend	
Responsibilities	Collaborators	Responsibilities	Collaborators
<ul style="list-style-type: none"><li>• Store the data of indexed websites</li><li>• Provide access to data of indexed websites</li></ul>	<ul style="list-style-type: none"><li>• Crawler</li><li>• Query</li><li>• Frontend</li></ul>	<ul style="list-style-type: none"><li>• Provide an easy search page to enter the query</li><li>• Render search results</li></ul>	<ul style="list-style-type: none"><li>• Server</li></ul>

# Architecture

## Tol Microservices Architecture

