

A self-hosted API for web metadata retrieval

→ Functional Requirements:

1. The system should be Free and Open Source.
 - The API will be free of cost for every user.
 - The Source Code of the system will be public on the Internet.
2. Account:
 - Developers have to register first in order to access the service.
 - We will provide API_KEY on successful registration.
3. API Endpoint:
 - Which can be used by other developers to access Web Metadata Retrieval Service.
 - GET Method will be used to perform API Requests.
 - Some of the tentative parameters for GET Request.

API_KEY
WEBPAGE_URL
CACHED

4. The system should return metadata of the requested web-page URL on every API call.

Response Attributes
Status Code
Title
Thumbnail
Page Content

5. The system should cache every response for better performance.

Database Table Attributes
Webpage Address (PK)
Title
Content
Thumbnail
Timestamp

6. Documentation:

→ We will provide a guide on how to use the service. So other developers can easily integrate the API in their products.

→ Non Functional Requirements:

1. The System should be reliable enough to respond to every request.
 - As we are going to make it Free to use service, Someone can break the server by calling the service inside an endless for loop!
 - The number of Requests for each user is limited to 1000 per day.
2. The System should provide high performance.
 - Caching will accomplish the Fast Response Time.
 - Thumbnail Compressor can be developed for bandwidth efficiency.
3. System maintenance:
 - Cache entry will be erased after 10 days.
4. The System should be flexible enough to use on any platform.
 - API should be able to integrate into any iOS, Android, Web-based projects.

→ Domain Requirements:

1. Web page URL should be public and accessible to retrieve metadata.
2. Web page HTML source code should be generic and well structured to retrieve metadata efficiently.