Tiki Crawl

A crawler tool for checking links or gathering content from websites.

This is the alpha version of a crawler tool for checking links or gathering content from websites. It relies on the Crawler library from Spatie. Kudo to those guys.

Introduction

Tiki-Crawl is a powerful tool that allows you to crawl and index external websites or content from remote sources. It enables you to create a local index of content from external sites, which can be useful for various purposes such as aggregating content, building a search index, or archiving information.

With Tiki-Crawl, you can specify a list of URLs or feeds from external website or remote sources that you want to index, and TikiWiki will periodically crawl these sources to fetch and index the content. This process is often referred to as web scraping and web crawling

What is Tiki-Crawl?

Tiki-Crawl is a web scraping and web crawling feature that enables users to fetch and index content from external websites or remote data sources. It automates the process of gathering information from these sources and can stores it.

Requirements

To use Tiki-Crawl effectively, ensure that you have this version installed (but it may very well be that it works on older versions):

- PHP: Tiki-crawl requires php version 8.2.6 or higher.
- Node: Tiki-crawl requires node version 18.16.0 or higher.

Installation

First you need to clone the tool from https://gitlab.com/tikiwiki/tiki-crawl.

This piece of code has been tested with php 8.2.6 and node v18.16.0, make sure you have those version installed (but it may very well be that it works on older versions, code is not that complicated).

composer update npm install

Usage

First you need to configure your options. You can override any options from config/config.default.php by creating a config/config.php file where you will be adding new values that will override the one in config/config.default.php, for example:

<?php \$options['timeout'] = 600; \$options['js'] = true;</pre>

• Note: You don't have to change values from config/config.default.php.

Then you can launch the crawling with the command ./bin/crawl following with the link of the website that you need to crawl. like the bellow command:

./bin/crawl https://books.toscrape.com

• Note: toscrape.com is useful for testing crawler, you can replace it with the link of any website that you need to crawl

Config options

This are configuration options that you can override in you new config/config.php file

| Name | Туре | Default | Description |
|----------------|----------|-----------|---|
| timeout | integer | 60 | the maximum time that should be waited before getting a response for any page crawled |
| cli | boolean | true | show a progress dotted line while launching it in console |
| log | boolean | true | keeps logs in logs/ directory (one for access one for errors) |
| store | boolean | false | store crawled pages in collected-data/ directory |
| max_size | integer | 2 | when store/ is enabled, the maximum size of stored documents, if you want to get pdfs you should up |
| limit | ?integer | 5 | number of pages to crawl, set to false for unlimited crawls |
| js | boolean | false | use headless chrome with puppeteer (takes much longer, and requires to have puppeteer installed) |
| internal | boolean | true | only crawl urls that are on the same host |
| concurrency | integer | 10 | number of concurrent requests to make |
| max_depth | ?integer | false | if you want to only get the immediate links on the page you are crawl, set 1, you can decide how deep you want to crawl from initial page |
| delay | ?integer | false | add a delay in milliseconds between requests |
| skip_urls | ?array | false | if you stumble upon problematic urls that make the crawler crash, you can skip them by listing them in this array |
| allow_redirect | boolean | false | wether or not follow 30x redirects |
| ignore_robots | boolean | false | bypass instructions contained in robots.txt file |
| allow_nofollow | boolean | false | bypass the rel="nofollow" directive in links |
| user_agent | string | TikiCrawl | the user-agent header sent with http requests |

Those options will be passed to spatie, you can learn more about those at https://github.com/spatie/crawler/

Roadmap

- handle the case where headless browser fails miserably and crawler lib don't catch it
- improve crawling on sites by using the canonical url that may be declared inside the html
- add an option to try gathering or checking http status on images (for finding missing ones)
- publish as a composer package
- add a feature in Tiki to make use of it

Notes

- It relies on the Crawler library from Spatie (Over 7 million downloads).
- It starts off as a tool just for developers, and will eventually be integrated in Tiki, so accessible to power users.

This was used to gather data for an upcoming AI Chatbot we are working on (more news on this later, along with some code).

Related Link

https://gitlab.com/tikiwiki/tiki-crawl