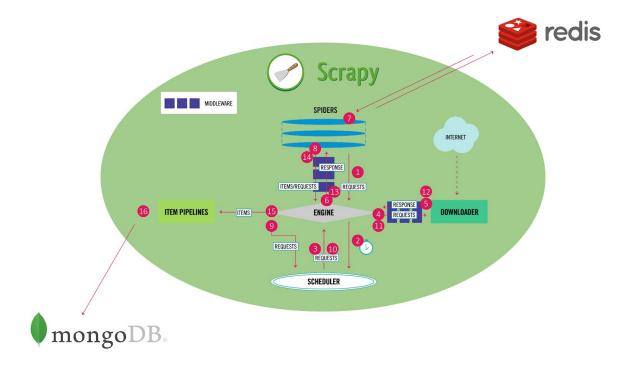
Data Flow of the scraper



The data flow in Scrapy is controlled by the execution engine, and goes like this:

- 1. The Engine gets the initial Requests to crawl from the Spider.
- 2. The <u>Engine</u> schedules the Requests in the <u>Scheduler</u> and asks for the next Requests to crawl.
- 3. The <u>Scheduler</u> returns the next Requests to the <u>Engine</u>.
- 4. The <u>Engine</u> sends the Requests to the <u>Downloader</u>, passing through the <u>Downloader</u> <u>Middlewares</u> (see <u>process_request()</u>).
- 5. Once the page finishes downloading the <u>Downloader</u> generates a Response (with that page) and sends it to the Engine, passing through the <u>Downloader Middlewares</u> (see <u>process_response()</u>).
- 6. The <u>Engine</u> receives the Response from the <u>Downloader</u> and sends it to the <u>Spider</u> for processing (getting article urls), passing through the <u>Spider Middleware</u> (see <u>process spider input()</u>).
- 7. Inside the spider each url in the response will be checked for redundancy with redis.
- 8. When an url doesn't exist the <u>Spider</u> returns a new Requests (to follow) to the <u>Engine</u>, passing through the <u>Spider Middleware</u> (see <u>process spider output()</u>).
- 9. The <u>Engine</u> sends the processed Requests to the <u>Scheduler</u> and asks for possible next Requests to crawl.
- 10. Same as 3.
- 11. Same as 4.
- 12. Same as 5.
- 13. Same as 6.
- 14. The <u>Spider</u> processes the article and returns the scraped item to the <u>Engine</u>, passing through the <u>Spider Middleware</u> (see <u>process spider output()</u>).
- 15. The Engine sends the processed items to Item Pipelines.
- 16. <u>A specific class</u> in the <u>Item Pipelines</u> connects to the <u>MongoDB and inserts</u> the processed items.