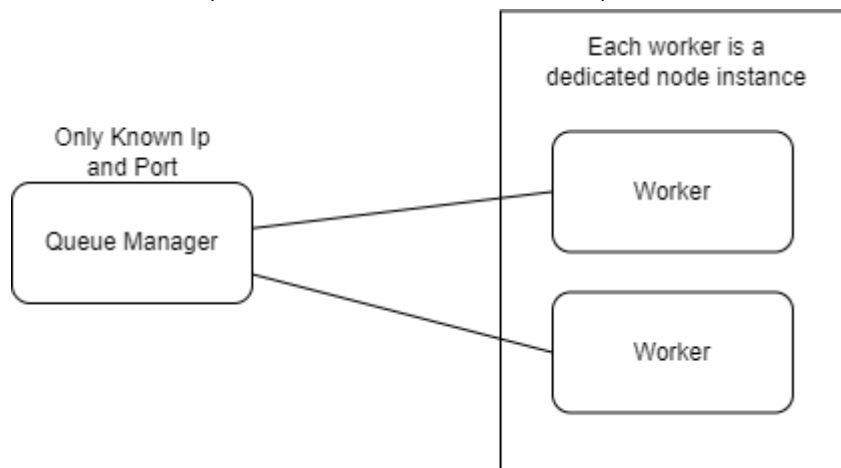


You are given a list of scientific names for different animals. Your job is to find out the common name and description of each animal.

There are 2 parts of the system

1. Queue Manager (only 1)
2. Worker (can be more than 1 instances)



Queue Manager

Read the list of scientific names from input.json, and distribute each of them to available workers. In the end, write the list as output.json file. Please also calculate the time from start to finish.

Technical details

- Use express
- Running on localhost:5555

Worker

Scrape the wikipedia article and find out the common name and description of each given animal.

Technical Details

- Isn't allowed to read or write any local files.
- Get one scientific name once at a time from the Queue Manager
- Use puppeteer
 - Go to <https://www.wikipedia.org/>
 - Search the scientific name
 - If goes to the page directly, find out the common name (main heading of the article) and the very first paragraph
 - If goes to the search page

1. If shows some spelling correction (showing "Did you mean:"), click it
 2. Click the first link
 3. Follow the above guide on how to scrape the page
- Only has one browser window for each worker
 - Report results back to the Queue manager
 - If it just can't do it, also report failure to the queue manager