Home Assignment -
News Analyzer

General Guidelines
- In this assignment you would need to present your skills in:
  - Backend development:
    - Architecture, code modeling and design patterns
    - Async / Multi Thread programing
  - Frontend development:
    - Good modeling of javascript code
    - DOM Changes Performance
- Assume you work with a lot of data, so the performance matters.
- You may choose to work with any technology, libraries or frameworks on the server side and on the client side.
- All **external api** will be called from the **server**.
- You will use https://newsapi.org/ api
- You can find the docs here: https://newsapi.org/docs
- **Don't** fight with the news api.
  - It has limitations.
  - you **don't** need to develop workarounds.
- Save the assignment in public github repository and send the link

Tasks:
1. Get api key from https://newsapi.org/
   a. The api limit to 500 calls per day. In case you pass it get another api key.
2. Load news from source
   a. The UI will have a load button which loads bbc news feed
   b. On load, the server will collect news and count each word from **title** and **description**.
   c. Save the words counts to storage (file or any database of your choice)
   d. Use the following endpoint query:
      http://newsapi.org/v2/everything?language=en&pageSize=100&sortBy=publishedAt&sources=bbc-news&apiKey=[YOUR_API_KEY]
3. Add **Words Cloud** to the UI which shows the data saved in the server.
4. Handle heavy loads
   a. Change the load api to load last 7 days in parallel
      i. Each day will be a different call to newsapi.org api.
      ii. Use "to" and "from" parameters
   b. Handle multiple updates of storage at the same time. (each day merges separately)
5. BONUS: Add list of news sources to load
   a. See docs https://newsapi.org/docs/endpoints/sources
   b. Change the load api to load news by source parameter
6. BONUS: Add datepicker to UI to allow choosing news feed timespan