

# Java assignment

We need to develop a rest service in a Java which is responsible to extract all numbers from the content in an input document. We would also like to get a 'reference' to the original document for each number in the result.

## Requirements

- The input document for the rest service should support plain text content.

Example:

```
One sentence with no more than 10 words and a number.
Another sentence, on line 2 of this document, with nine words.
In total, we have 3 results in numeric format, and five results in string format.
```

- The reference in the result can be
  - a line number and character position in the original document where a number is found, or
  - a text snippet ("fragment") of a few surrounding words to give context, or
  - ... (choose something to your own taste, preference or skills)
- The output needs to be json formatted, please design your own input and output payloads.

## Evaluation Criteria

- Input size can vary from KB to MB, If you want to implement things in a better way but do not have time to do so, please describe the changes in comments.
- Accuracy in extraction of numbers is not critical here.
- Please provide a complete (and production-ready) solution, including (but not limited to) a README file with instructions on how to build and use.
- If there are any unclear requirements, or if you need to make assumptions, please specify them as code comments or in the README file.

## Additional

- How would your application change if we would like to support html or xml content? If html/xml markup tags or attributes are present in the document, they should be omitted in the result.  
Example: In `<address2 type="work" order="1">Zuidpoolsingel 4</address2>`, we would be interested in only 4, and not 2 and 1.
- What would you recommend if a Number can be represented as a word ("Seven") or in numeric format (7)?
- What would you advise to implement further if this needs to be deployed in a production environment?

We expect you to no spend more than 4 - 6 hours on this. Please send back your complete source code (either in a compressed file, or on a public repository like github), and any usage instructions in the README file. And take the opportunity to showcase what you think is important!