# Introduction to elgooG Search Engine

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### Initial interface



#### Result interface



#### How to make it

- (1) Crawler
- (2) Normalized and divided
- (3) Build the inverted index
- (4) Solve queries

# Optimization

(1) The value of word is related to the times that the word appears in website, and it also related to the length of the word.

$$Value_{i,id} = (1 + \lg(t_{i,id})) * (\lg(\frac{N}{n_{id}}))^{1.75} * (\lg(len_{id} + 1))$$

(2) The value of word is related to whether it is a number.

$$Value_{i,id} = (Value_{i,id})' * (\lg(len_{id} + 1) + 1.6)$$

# Optimization

(3) The sorce of website is related to the lenght.

$$\textit{Lenght}_i = \sqrt{\sum{(\lg{t_{i,id}})^2}}$$
  $\textit{Sorce}_i = \textit{Sorce}_i^{'}/\textit{lenght}_i^{0.495}$ 

# Optimization

(4) Different websites have different weight.

If the page is about prefessor:

$$Sorce_{i} = Sorce_{i}^{'} * 1.6$$

If the page is about laboratory or the overview of School of Information:

$$Sorce_i = Sorce_i' * 1.2$$

If the page is about news or notice:

$$Sorce_{i} = Sorce_{i}^{'}/1.2$$









Thank you for listening!