

Homework 4

Database Part

- can decide the structure by yourself.
- can learn JDBC from previous PPT or students

JavaMail Part

- download the .jar file
- add it to the correct path
- watch the video
- can use Maven

Semantic Part

- The easiest way is to judge whether the target result is in the answer or not.
- Example:

A: Do you like me? (Sent From Address_1)

B: Yes, I like you. (Received From Address_2)

C: No, I don't like you. (Received From Address_3)

Then we can determine the result by 'Yes' and 'No'.

This is the BASIC requirement of this homework.

Semantic Part

- However, this case may happen in our daily life:

A: Do you like me?

B: You are a good guy!

How to judge whether he/she likes me or not?

Here I will introduce some basic concepts of NLP and semantic analysis.

Natural Language Processing

- Language->a collection of words->a collections of symbols->symbol can be represented by mathematical model->computers can calculate
- how to make computer learn?
- Step 1: we create an answer list which contains the sentence and the answer
- e.g [You are a good guy! (No), I hate you (No), I want to kill you(No),.....]

Natural Language Processing

- Step 2: compare the message you received from the email address with the answer list.

sentence->vectors->calculate the distance between the message and the answer in answer list->find the closest answer in the answer list->give the prediction.

This is the idea of 'KNN' algorithm, Also you can try 'Cosine Similarity', 'Naive Bayes', 'SVM'.