

AI Assignment 5 report

NL Elective Advisory System

- Processing the file to assign tags
- Output
- Assumptions

Processing

- First we will read the file and perform word tokenization on it.
- The separated tokens will be stemmed using Porter Stemmer.
- We compare the tokens and stems with the taglist and their stems, and assign any tags that exist.
- Now we check for some specific words that correspond to some of our tags.

'artificial intelligence', 'computer science', 'electronic', 'social sciences', 'miscellaneous'


We check these words and their stems and assign tags as found.

- Now we check if the user has mentioned their stream in the input text, and assign if they have.
- Duplicate tags are removed and the taglist is written to facts.pl

Output


Input 1

Input text :-

 jupyter input_text.txt ✓ 16 minutes ago

```
File Edit View Language
1 i am interested in social science and maths.
2 My stream is csai.
```

Facts file :-

 jupyter facts.pl ✓ a few seconds ago


```
File Edit View Language
1 taglist([math, ssh, ai]).
```

Prolog Output :-

```
?- taglist(X).  
X = [math, ssh, ai].  
  
?- connectP.  
  
The recommended course for you are  
  
Artificial Intelligence  
CTRSS  
Computer Vision  
Differential Equations  
Introduction to Intelligent Systems  
Machine Learning  
Math I- Linear Algebra  
Multivariate Calculus  
Nation and her Narratives  
Natural Language Processing  
Numerical Methods  
Probability & Statistics  
RMSSD  
Real Analysis I  
Real Analysis II  
Statistical Machine Learning  
true.  
  
?- ■
```


Input 2

Input text :-

 jupyter input_text.txt ✓ a few seconds ago

File	Edit	View	Language
1	i am interested in designing.		
2	i also have to complete some of the common courses.		

Facts file :-

 jupyter facts.pl ✓ a few seconds ago

File	Edit	View	Language
1	taglist([design, common]).		

Prolog Output :-

```
?- taglist(X).  
X = [design, common].  
  
?- connectP.  
  
The recommended course for you are  
  
Communication Skills  
Computer Organisation  
Data Structures & Algorithms  
Design Drawing and Visualisation  
Design processes and perspectives  
Digital Circuits  
Human Computer Interaction  
Introduction to HCI  
Introduction to Programming  
Math I- Linear Algebra  
Probability & Statistics  
Visual design and communication  
true.  
  
?- ■
```

Assumptions

- Input text only contains positive statements. So 'i am not interested in design' is not a valid input statement.
- Input text only contains statements that are relevant to the interests and stream of the user.
- Only 1 stream will be mentioned by the user.