

# Artificial Intelligence

## Assignment-5

To build a small natural language interface in Python that will provide inputs to your electives advisory system developed in Prolog.

Explanation: - In this, I have implemented the components of NLI interface such as tokenization and stemming using nltk in Python which converts the input string to token (here in words) and then stemming it. The inputs taken using NLI will finally be used to assert facts in a separate facts.pl file where the facts will be written and in the main Prolog code, the facts.pl will be consulted to dynamically assert the facts written in the loaded file and put to our use.

Output Snippets: -

```
Hello!! This is an Elective advisory system.

You need to answer a few questions to help us in assisting you better.
This system will suggest you the courses and electives you can take after you
have completed semester 4. Before that all the courses are mandatory, so excel
in them as they are important pre-requisites.

Please tell if you have completed the 4th semester or not.
yes i have completed the 4th semester
From the below suggestions, choose your interest.
1. Machine Learning
2. Information Security
3. Designing
4. Electronics
5. Economics
6. Artificial Intelligence
State your interest: machine learning and designing

So, you have an interest in Machine Learning, Designing, and this is great.
This field has a lot of career paths. Here are some of them which are suitable
for you: -
For interest in machine learning: -
1. Research      2. Data Analyst      3. ML-Engineer      4. NLP-Scientist

Are you interested in pursuing any of the above career paths?
yes i have interest in research

For interest in designing: -
1. Graphic Designer      2. Animations      3. Filming      4. Game Developer

Are you interested in pursuing any of the above career paths?
yes i like to do filming
```

```

*****
Here is the list of Electives as per your choices
*****

MACHINE LEARNING
-----

COMPUTER GRAPHICS
-----

3D ANIMATION
-----

GAME DESIGN AND DEVELOPMENT
-----
[{'X': 'ML'}, {'X': 'CG'}, {'X': 'DA'}, {'X': 'CGDAD'}]
PS C:\Users\goelv\OneDrive\Desktop\all work\2020413_AI_assignment1\New folder>

```

Second output: -

```

Hello!! This is an Elective advisory system.

You need to answer a few questions to help us in assisting you better.
This system will suggest you the courses and electives you can take after you
em as they are important pre-requisites.

Please tell if you have completed the 4th semester or not.
2. Information Security
3. Designing
4. Electronics
5. Economics
6. Artificial Intelligence
State your interest: electronics and economics

So, you have an interest in Electronics, Economics, and this is great.
This field has a lot of career paths. Here are some of them which are suitable
for you: -
For interest in electronics: -
1. Electrical Engineer    2. Iot Engineer

Are you interested in pursuing any of the above career paths?
i am interested in iot engineering

For interest in economics: -
1. Trading    2. Finance Consultant    3. Bank Management

Are you interested in pursuing any of the above career paths?
i like to be finance related things

```

```

*****
Here is the list of Electives as per your choices
*****

INTERNET OF THINGS
-----

FOUNDATIONS OF FINANCE
-----
[{'X': 'IOT'}, {'X': 'FF'}]
PS C:\Users\goelv\OneDrive\Desktop\all work\2020413_AI_assignment1\New folder>

```