

## ASSIGNMENT-2

### Playing with CoreNLP

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#### Errors in the Named Entity Recognition examples:

##### Example-1

A **two-day** workshop was conducted on the topic NLP at **IIT** **Palakkad**

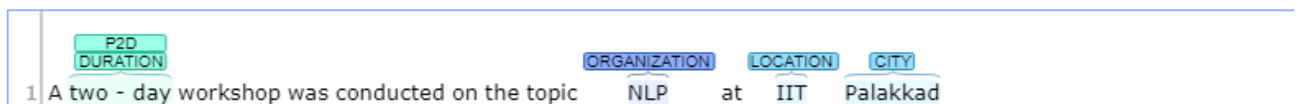
Duration

Organization

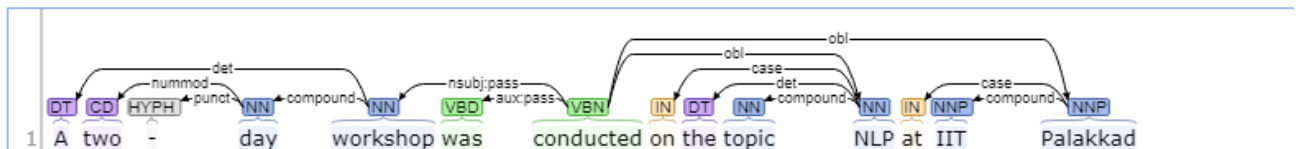
City

Detected:

#### Named Entity Recognition:



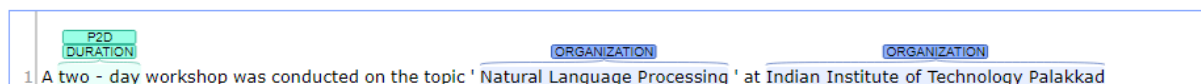
#### Basic Dependencies:



- In named entity recognition NLP is identified as an organization even if it is a popular word.
- In named entity recognition IIT is an organization, but it identified as a location.

If we elaborate the abbreviation it will correctly detecting:

#### Named Entity Recognition:



## Example-2

Virat Kohli resigned the captaincy of Royal Challengers Bangalore

Person

Organization

Detected:

Named Entity Recognition:

<b>PERSON</b>
1 Virat Kohli resigned the captaincy of Royal Challengers Bangalore

Basic Dependencies:

<b>NNP</b> compound <b>NNP</b> nsubj <b>VBD</b> <b>DT</b> det <b>NN</b> <b>IN</b> <b>JJ</b> amod <b>NNS</b> <b>NNP</b>
1 Virat Kohli resigned the captaincy of Royal Challengers Bangalore

- Actually Royal Challengers Bangalore is an organization but CoreNLP didn't catch it.
- Royal Challengers Bangalore is compound NNP but it's not catch in dependency parsing.

## Example-3

Kylian Mbappe extended his contract until 2025 with Paris Saint-Germain

Person

Date

Organization

Detected:

Named Entity Recognition:

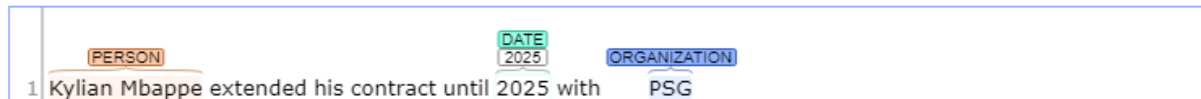
<b>PERSON</b> <b>DATE</b> <b>PERSON</b>
1 Kylian Mbappe extended his contract until 2025 with Paris Saint - Germain

Basic Dependencies:

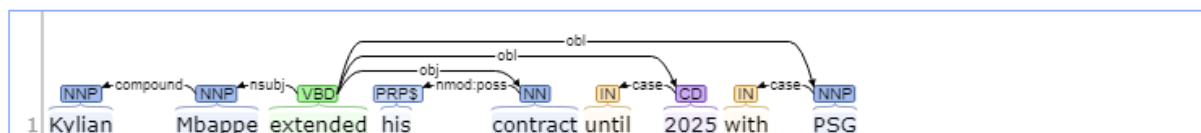
<b>NNP</b> compound <b>NNP</b> nsubj <b>VBD</b> <b>PRPS</b> nmod:poss <b>NN</b> <b>IN</b> <b>CD</b> <b>IN</b> <b>NNP</b> <b>NNP</b> <b>HYPH</b> <b>NNP</b>
1 Kylian Mbappe extended his contract until 2025 with Paris Saint - Germain

- Paris Saint-Germain is an organization, but identified it as a person
- Interestingly, PSG is the abbreviation of Paris Saint-Germain identified as an organization because it's popular. It's shown in the screenshot below.

#### Named Entity Recognition:



#### Basic Dependencies:



### Example-4

Suzuki is an automobile company headquartered in Hamamatsu, Japan.

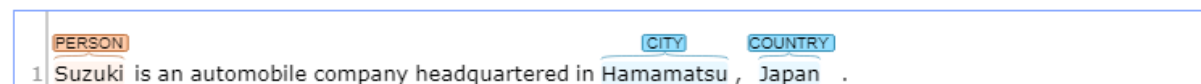
Organization

City

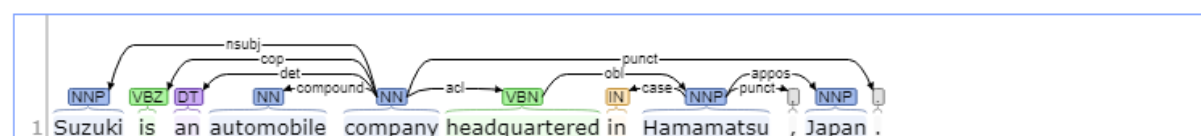
Country

Detected:

#### Named Entity Recognition:



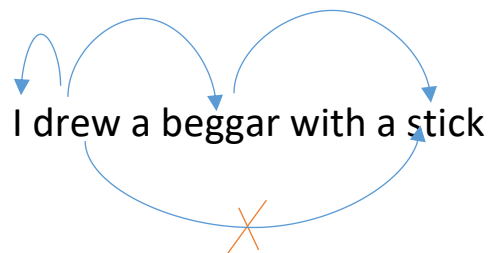
#### Basic Dependencies:



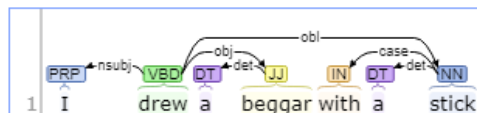
- Suzuki is an organization, but identified as person

## Errors in the Dependency Parsing examples:

### Example-5

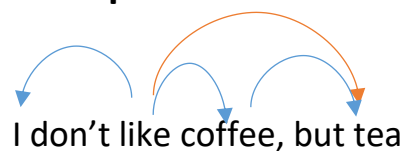


Basic Dependencies:

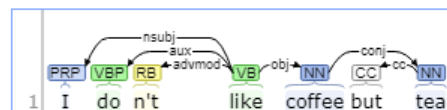


- Actually the meaning by dependency parsing detected by CoreNLP is drew with stick. But actual meaning is beggar with stick. So beggar should depends stick.

### Example-6



Basic Dependencies:



- It's not detecting the object dependency of like to the tea