Minicycle.en

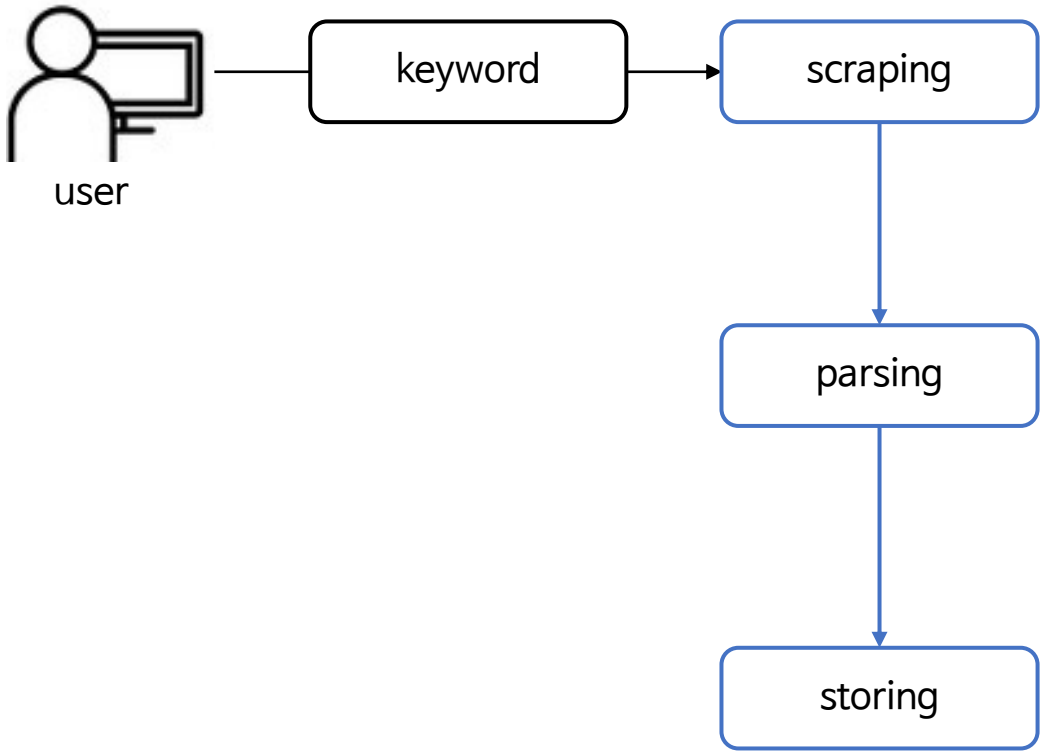
20210730

Self

```
>>> class MyClass():
...     def func_without_self():
...             print('function WITHOUT self')
...     def func_with_self(self):
...             print('function WITH self')
...
>>> myclass = MyClass()
>>> myclass.func_with_self()
function WITH self
>>> myclass.func_without_self()
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
TypeError: func_without_self() takes no arguments (1 given)
```

```
>>> id(myclass)
4517734736
>>> myclass_new = MyClass()
>>> id(myclass_new)
4517735024
>>> def print_id(self):
...     print(id(self))
...
>>> MyClass.print_id = print_id
>>> myclass.print_id()
4517734736
>>> myclass_new.print_id()
4517735024
```

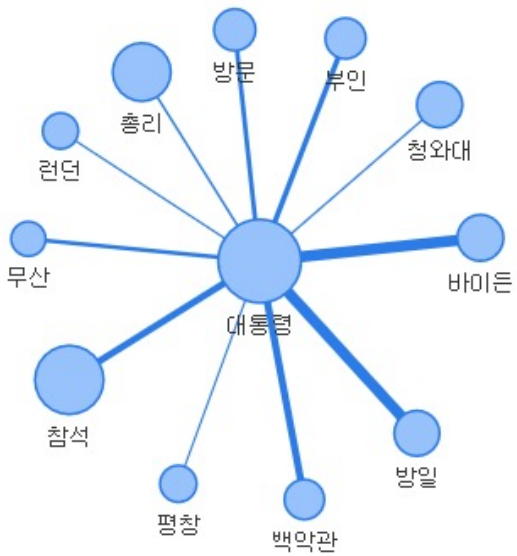
Tenders

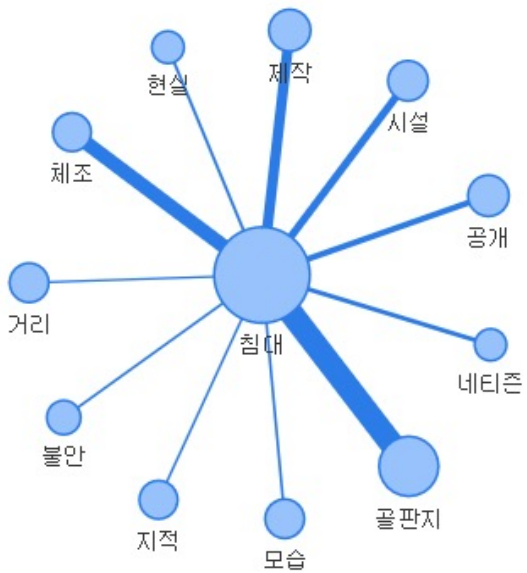


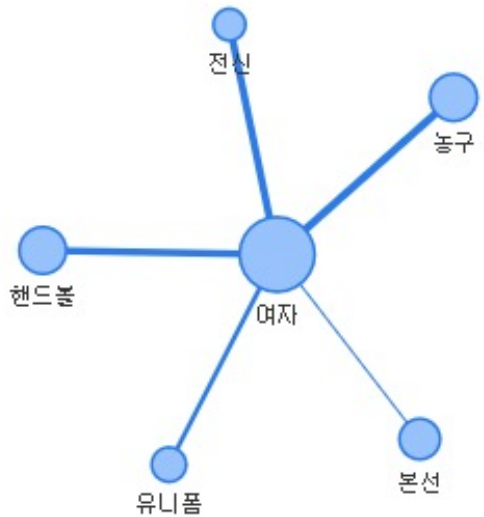
Summary:	Spain-madrid: Printing And Graphics Equipment		
Authority Name:	Upgrade to view		
Sector:	Printing and publishing		
Country :	Switzerland	**Action Deadline:**	21 Oct 2021
Notice Type :	Contract Awards		

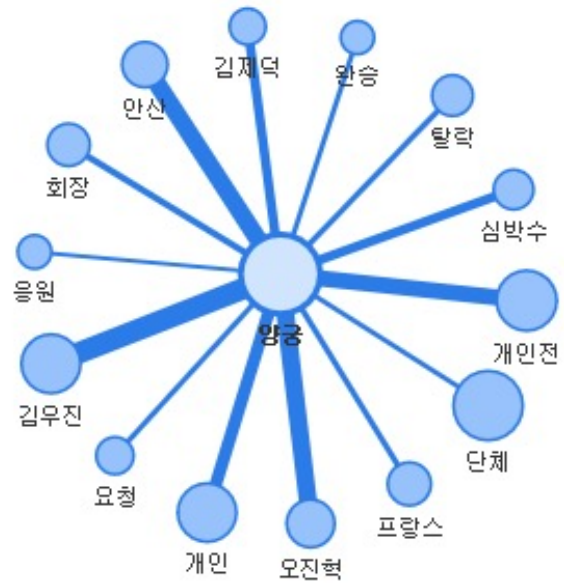

```
{
    "@context":"https://schema.org",
    "@type":"Event",
    "url":"https://www.globaltenders.com/full-detail/464043065",
    "image":"https://www.globaltenders.com/new-gt/tenders/assets/user/new/img/global-tenders-logo.png",
    "name":"Private Company",
    "description":"Spain-madrid: Printing And Graphics Equipment",
    "identifier":"464043065",
    "startDate":"Jul 21, 2021",
    "endDate":"Oct 21, 2021",
    "location":
    {
        "@type":"Place",
        "address":
        {
            "@type":"PostalAddress",
            "addressLocality":"",
            "addressRegion":"",
            "postalCode":"",
            "addressCountry":"Switzerland"
        },
        "name":"Private Company"
    },
    "offers":
    {
        "@type":"Offer",
        "name":"Spain-madrid: Printing And Graphics Equipment",
        "priceCurrency":"EUR",
        "price":"0",
        "validFrom":"Jul 21, 2021",
        "availability":"https://schema.org/LimitedAvailability",
        "url":"https://www.globaltenders.com/full-detail/464043065",
        "validThrough":"Oct 21, 2021"
    },
```


id	description	country	endDate	startDate	priceCurrency	price
464,181,330	Supply Of myipzspack Casket Boxes For Iconic Coi...	Italy	2021-08-09	2021-07-27	EUR	0
464,088,190	Management And Supply Of Christmas Baskets For...	Spain	2021-09-08	2021-07-23	EUR	229,100
464,043,065	Spain-madrid: Printing And Graphics Equipment	Switzerland	2021-10-21	2021-07-21	EUR	0
464,033,120	Providing Of Chairs At Lmrc Section, Mpp Section ...	India	2021-07-28	2021-07-21	INR	344,269
464,025,761	1 Electric Furnace	Japan	2021-09-13	2021-07-21	JPY	0
463,974,274	Assignment Of Scheduled Maintenance Service, Br...	Italy	2021-07-29	2021-07-19	EUR	0

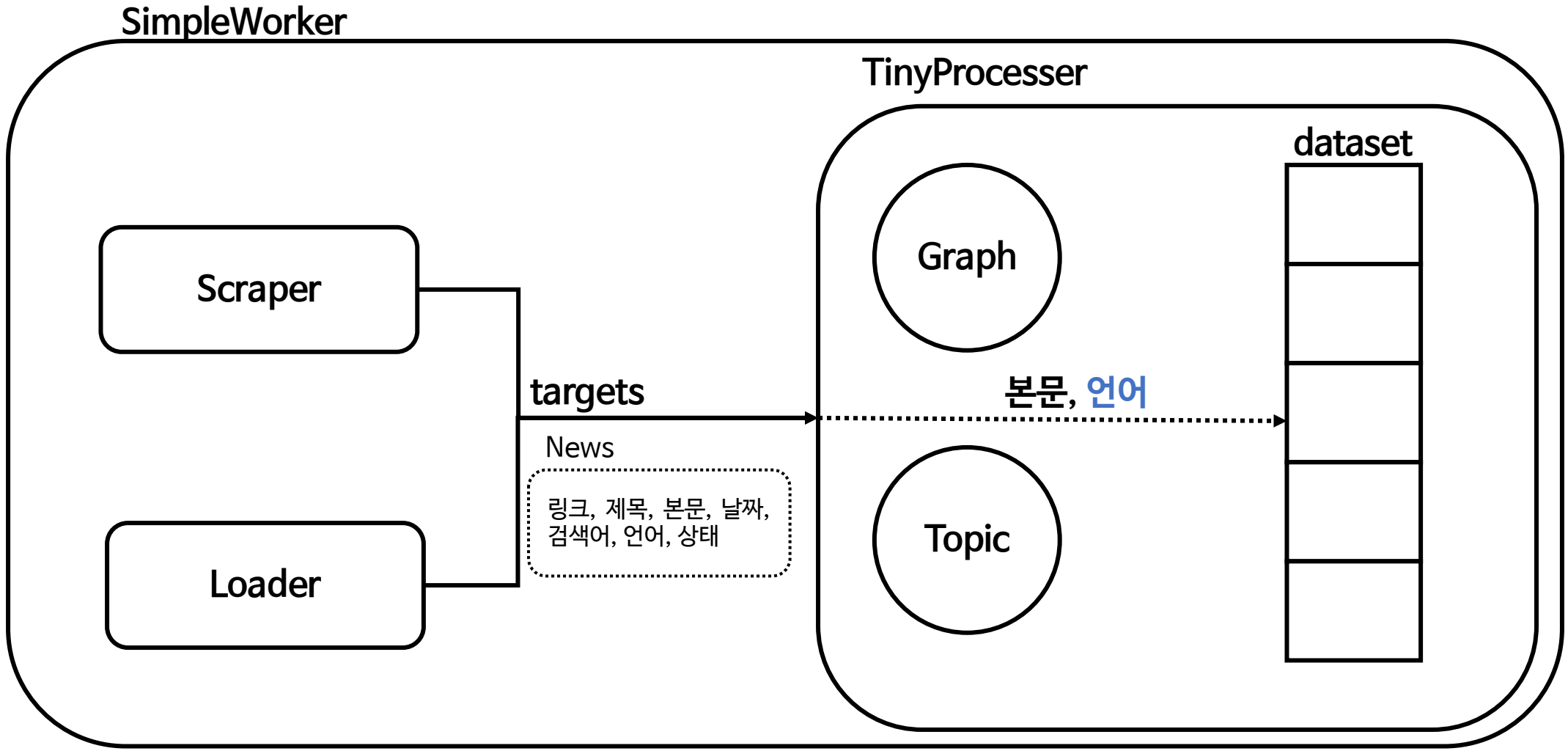

방문
부인
총리
청와대
런던
무산
바이든
대통령
참석
방일
평창
백악관


현실
제작
시설
체조
공개
거리
침대
네티즌
불안
골판지
지적
모습

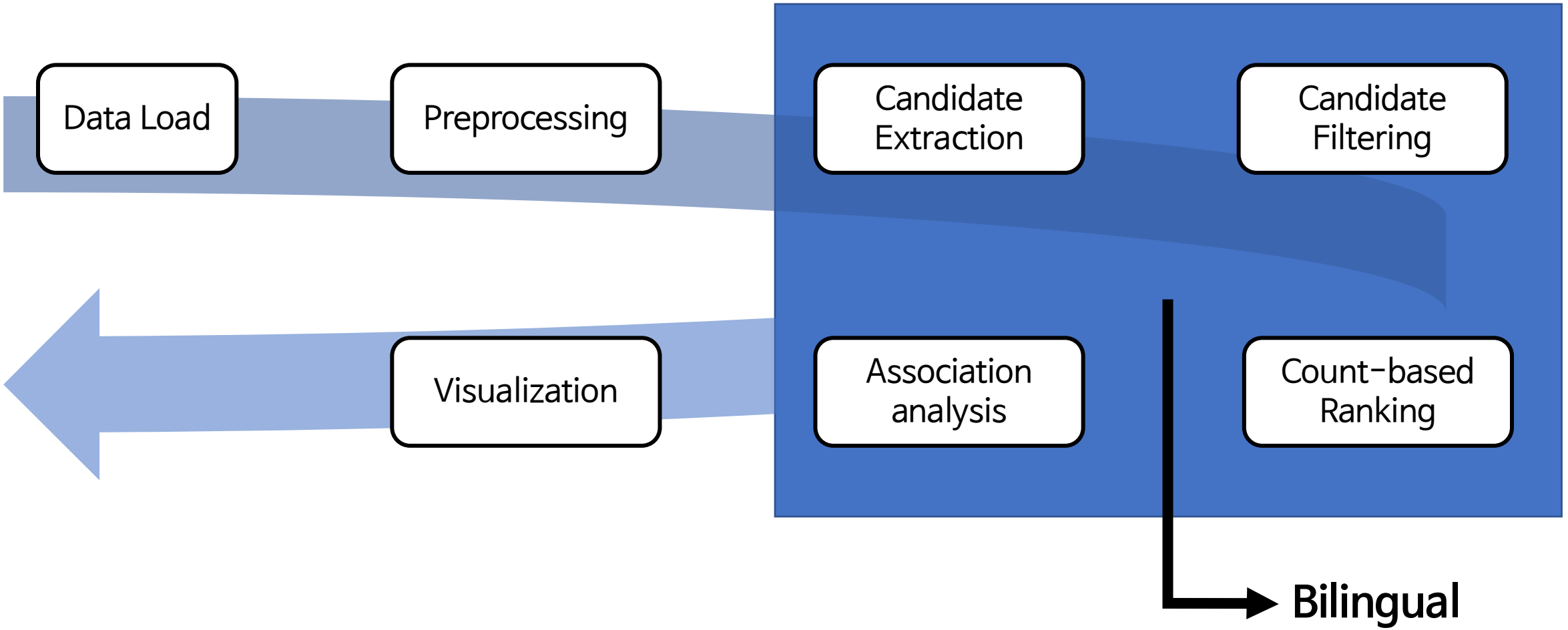

전신
농구
핸드볼
여자
유니폼
본선


김제덕
안신
완승
탈락
회장
심박수
응원
왕궁
개인전
김우진
단체
요청
프랑스
개인
오진혁

Architecture

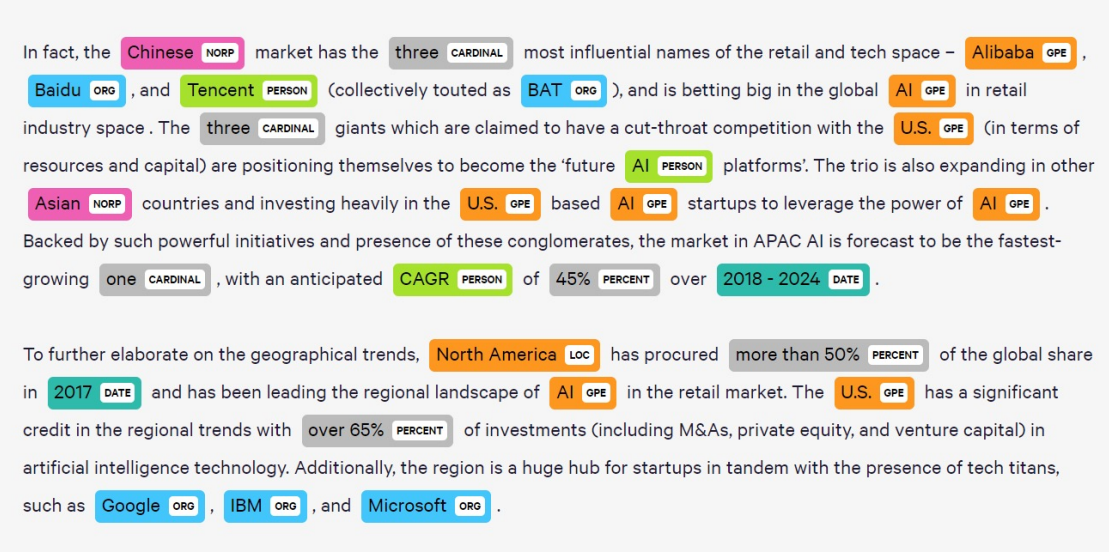


Workflow


Data Load
Preprocessing
Candidate Extraction
Candidate Filtering
Visualization
Association analysis
Count-based Ranking
Bilingual

Candidate Selection

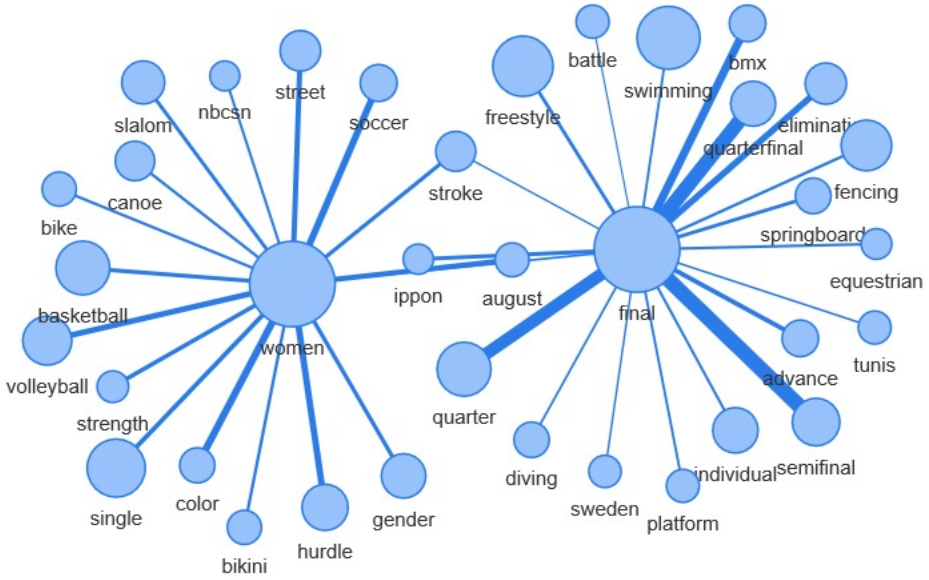
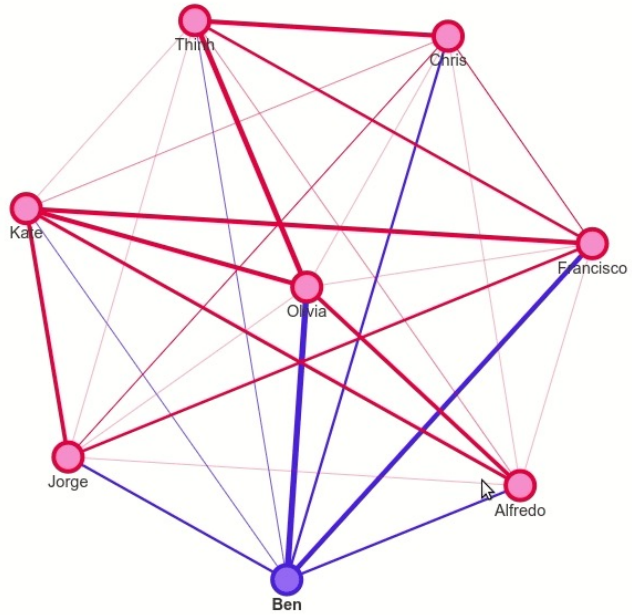
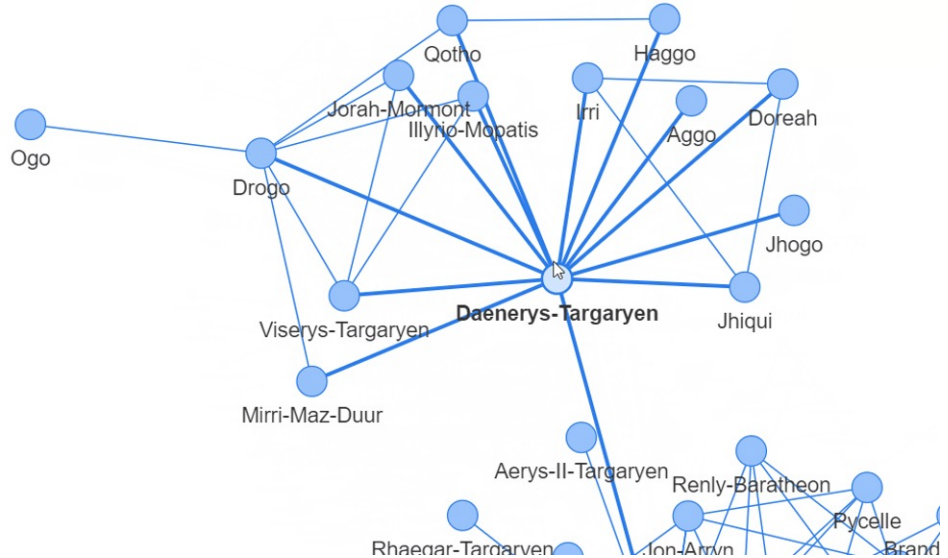
- 한국어: **soynlp** - LRNounExtractor ver.2
- 영어: **spacy** - NER(Named Entity Recognition) & Noun chunk
- **NER**



SYSTEM	TYPE	NER F
spaCy `en_core_web_sm` (2017)	neural	85.67
spaCy `en_core_web_lg` (2017)	neural	86.42
Strubell et al. (2017)	neural	**86.81**
Chiu and Nichols (2016)	neural	86.19
Durrett and Klein (2014)	neural	84.04
Ratinov and Roth (2009)	linear	83.45

ABSOLUTE (MS PER DOC)

SYSTEM	TOKENIZE	TAG	PARSE
spaCy	0.2ms	1ms	19ms
CoreNLP	0.18ms	10ms	49ms
ZPar	1ms	8ms	850ms
NLTK	4ms	443ms	*n/a*

Visualize

- **Wordcloud**
  - wordcloud
- **Network**
  - Networkx
  - + pyvis
  - + ?