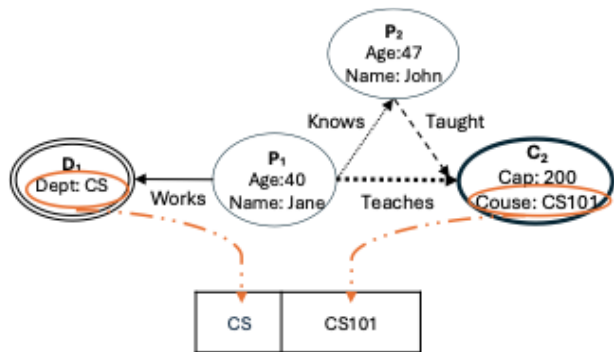




## User Demonstrations

Specify intentions by selecting on graphs and forming a demonstration table



## Sketch Discovery

Extract sketches from subgraphs



```
MATCH
(n1:Course)<-
[e1:Teach] ...
WHERE ?
RETURN ?1.Dept,
...
```

...



```
MATCH
(n2:Faculty)-
[e2:Taught]-
>(n3:Course) ...
WHERE ?
RETURN ?1.Dept,
...
```



## Sketch Completion

Completion with constraint P



$$P \leftarrow P \cup P'$$



Deductive reasoning



Query matching  
user intention

