

NLP for Requirements Engineering

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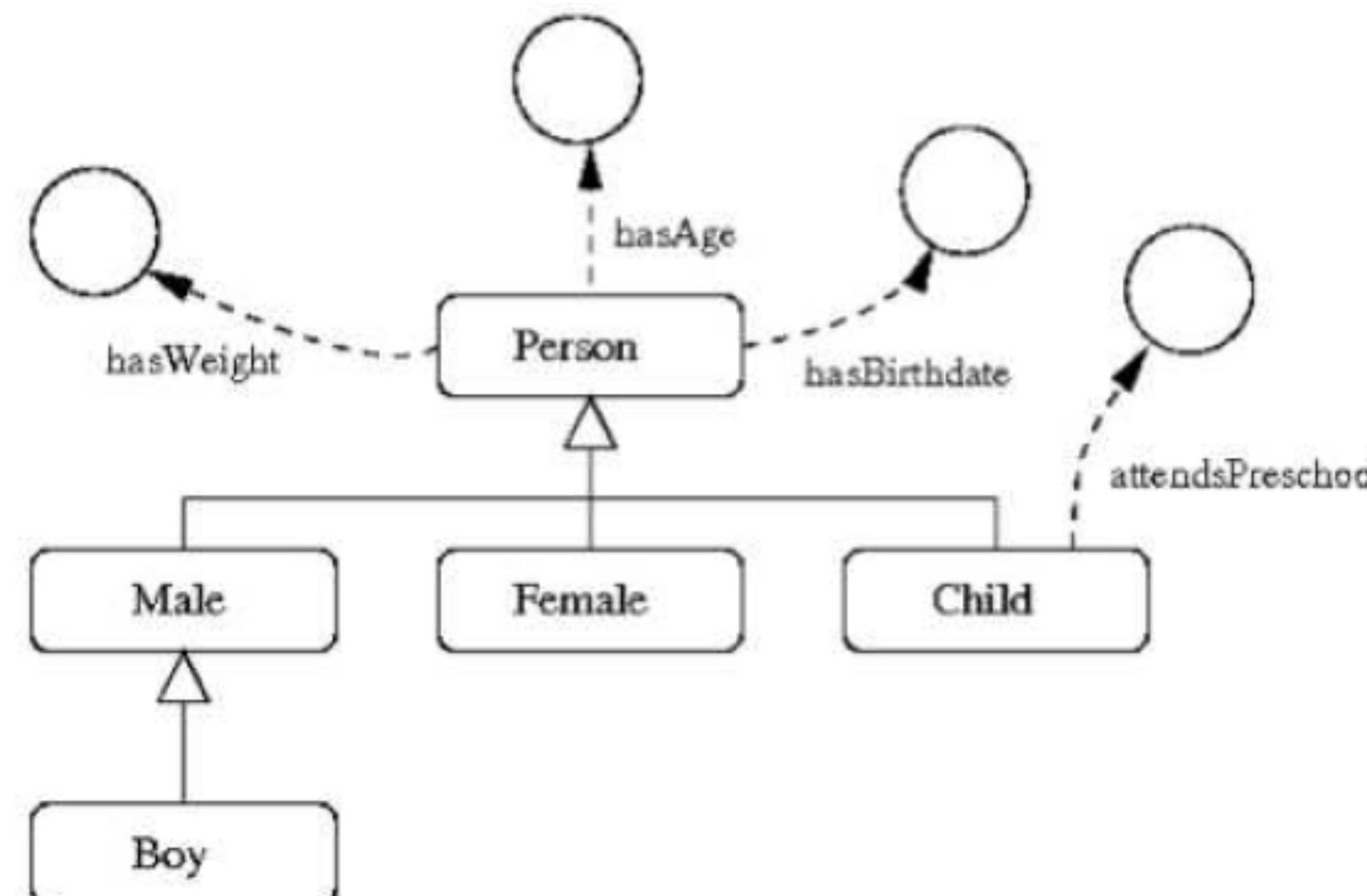


INSTITUTE FOR
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Use Requirement Templates

```
<article> <subsystem> <modal> <action>
<article> <subsystem> <modal> <action> <entity>
<article> <subsystem> <modal> <action> <constraint>
<article> <subsystem> <modal> <action> <entity> <constraint>
<condition> <article> <subsystem> <modal> <action>
<condition> <article> <subsystem> <modal> <action> <entity>
<condition> <article> <subsystem> <modal> <action> <constraint>
```

Use Domain Ontologies



Use NLP to Match Templates and Terms

```
=====
PART 3: Tokenization and POS-Tagging
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The|monitor|will|display|images|.
DT|NN|MD|VB|NNS|.

The|cursor|must|move|upon|mouse|movement|.
DT|NN|MD|VB|IN|NN|NN|.

Within|1|second|,|the|monitor|shall|update|.
IN|CD|JJ|,|DT|NN|MD|VB|.

The|processor|will|accept|interrupts|.
DT|NN|MD|VB|NNS|.

The|processor|shall|execute|.
DT|NN|MD|VB|.
```

View Real-time Feedback

A screenshot of a software application window titled 'FLOOR' with a menu bar including File, View, Reports, and Help. The main area is titled 'Requirements' and contains a list of requirements. A tooltip is displayed over requirement number 4, which reads: 'The windshield shall multiply'. The tooltip lists three variations of this requirement: 'The windshield shall multiply <Constraint>', 'The windshield shall multiply <Entity>', and 'The windshield shall multiply <Entity> <Constraint>'. Below the tooltip, requirement 4 is listed as 'The wheel shall steer.' and requirement 5 is listed as 'The seat shall move.'.