QUINT: Interpretable Question Answering over Knowledge Bases
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Motivation
- Interpretability by visualizing the complete derivation sequence from the question to the final answer
- Role-aligned templates are the main asset for interpretable question-answering
- Automatically learns role-aligned templates from question-answer pairs as opposed to existing methods which manually compile a handful of templates
- First step towards interactive question answering

Where was Martin Luther raised?

Answer(s)
Eisleben

Eisleben is a town in Saxony-Anhalt, Germany. It is famous as the hometown of Martin Luther, hence its official name is Lütherstadt Eisleben. As of 2005, Eisleben had a population of 24,552. It lies on the Halle–Kassel railway.

Question & Query

Where was Martin Luther raised?

Dependency parse of question

VERB
NOUN
auxpass
nsubjpass

VERB
NOUN
auxpass
nsubjpass

MartinLuther

birth

city

?VAR

?ANS

Brief Explanation
QUINT understood your question as follows:
The phrase “Martin Luther” is interpreted as Martin Luther
The words “was, raised” are interpreted as the relation Place of birth

Template Generation

Training Question
Where are Riddell Helmets manufactured?

Question Template
VERB NOUN VERB

Query Template
ENT PRED ?VAR PRED ?ANS

References
A. Abujabal, M. Yahya, M. Riedewald and G. Weikum. Automated Template Generation for Question Answering over Knowledge Graphs. WWW 2017
Demo URL: http://bit.ly/2xGHyCL