Rapid Prototyping for the Digital Humanities

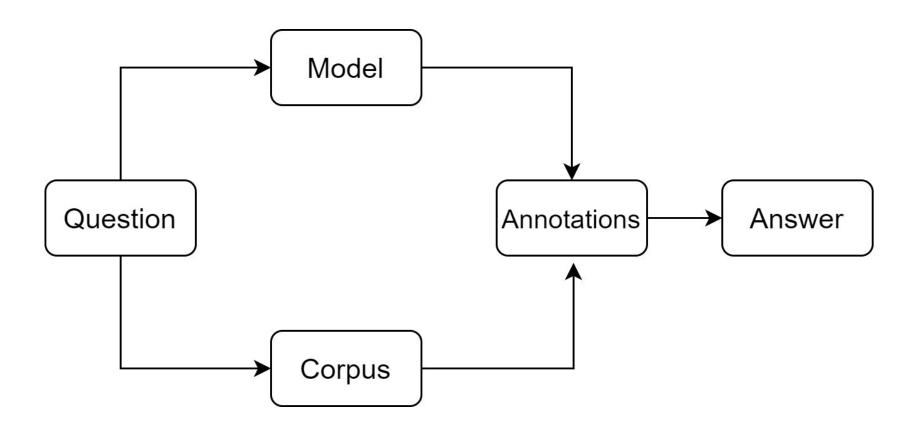
Defence of Master's Thesis
Hans Lienhop

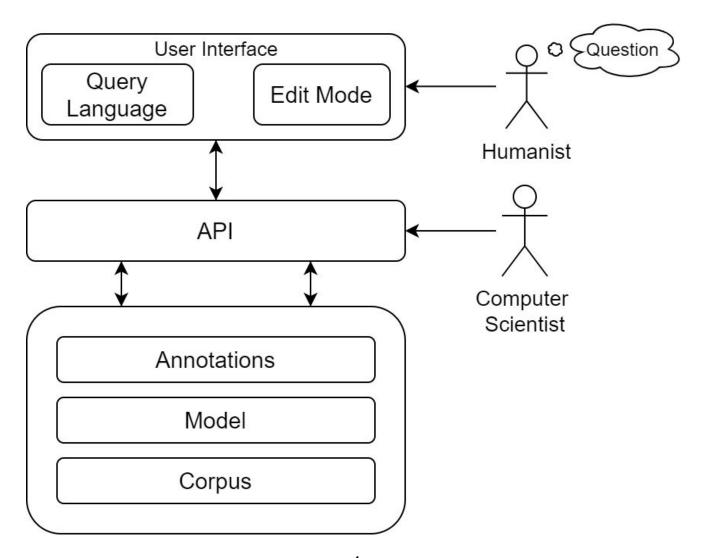
Digital Humanities?

Research in the humanities with digital methods

Rapid Prototyping?

- Quickly creating incomplete versions of software
- Allows for fast feedback regarding fulfillment of requirements





Faceted Search System

$$S=((T,\leq),O,I,Q)$$

T: A terminology consisting of abstract terms

 \leq : A reflexive and transitive relation over T, subsumption

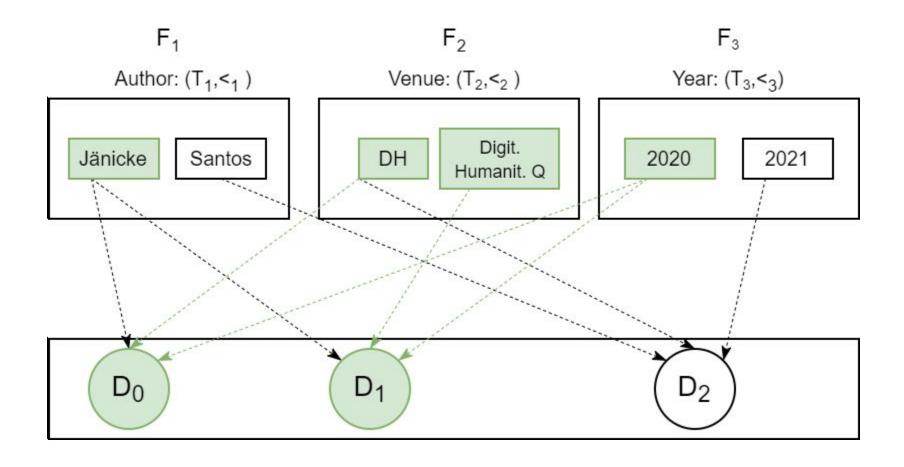
O: A set of objects indexed by the taxonomy

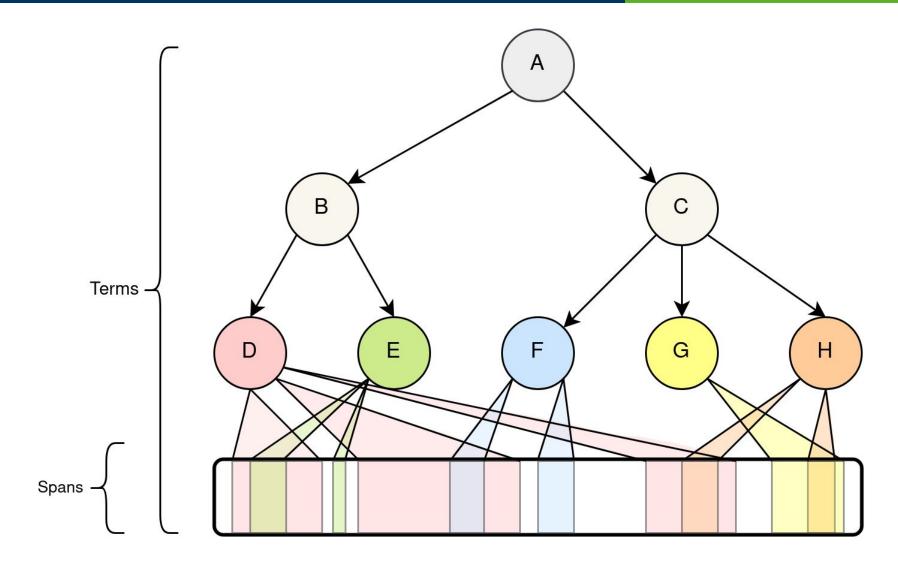
 $I: \mathsf{A} \text{ function } I: T o 2^O$, interpretation

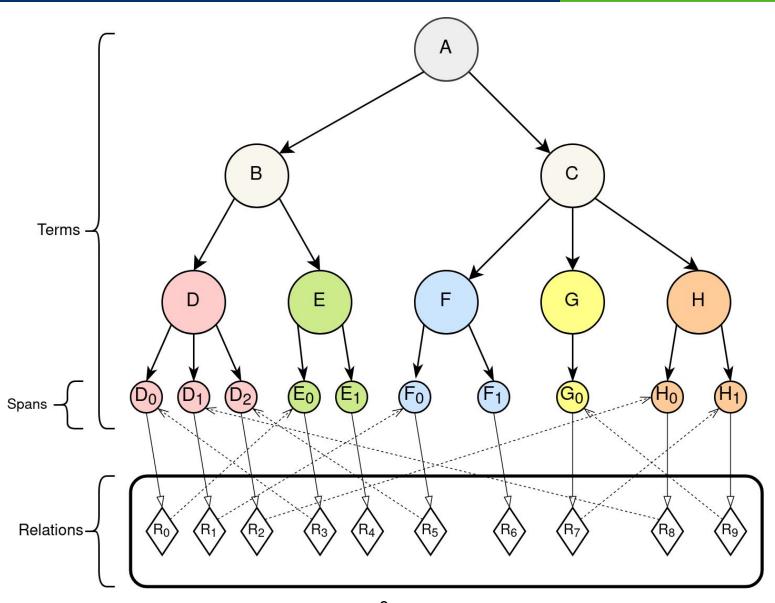
Q: The set of queries over T using basic boolean algebra

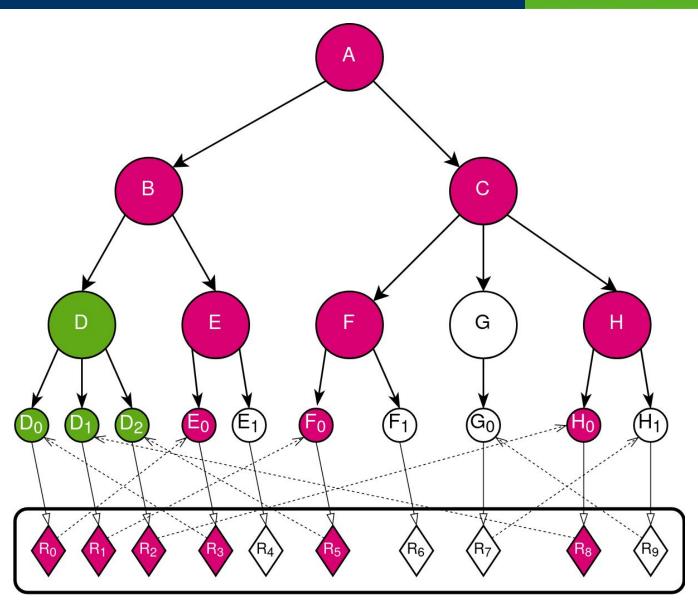
D(o) returns for each object the set of terms it is described by.

$$\longrightarrow I_D(t) = \{o \in O | t \in D(o)\}$$







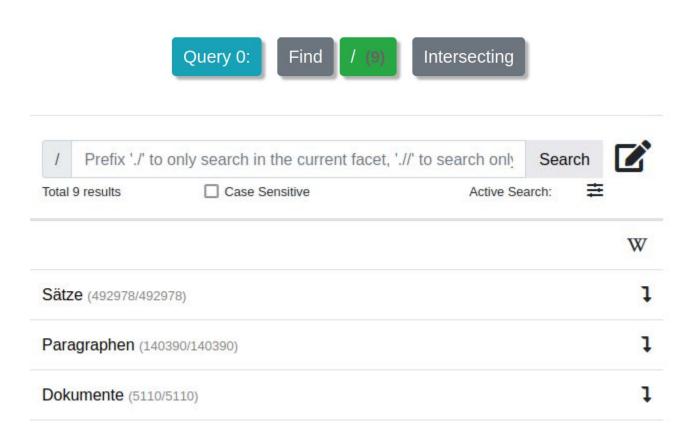


Query Language

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A INTERSECTING (B AND C)
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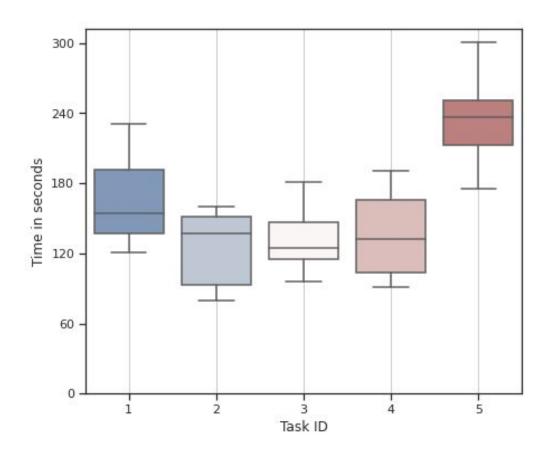
A INTERSECTING (B AND C) OR SIMILAR TO (D NOT E)

A SIMILAR TO (B) AND INTERSECTING (C INTERSECTING (D OR E))

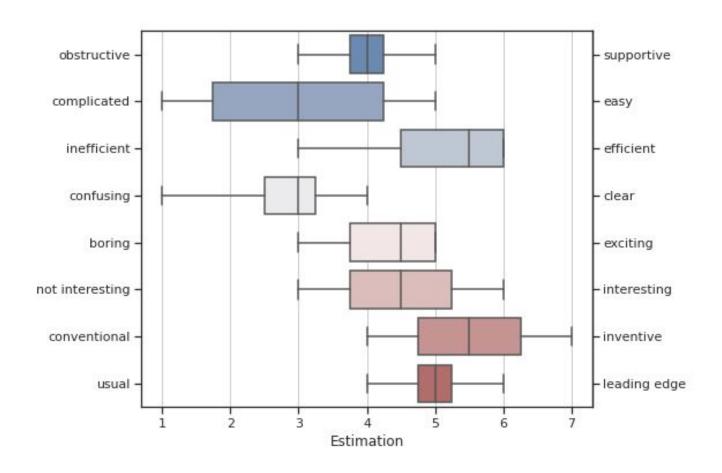


User Study

- 10 participants
- 4 explorative tasks, one annotating
- Evaluating:
 - Time
 - Estimated Difficulty
 - User Experience



Task	avg. Time	avg difficulty
1	167	3.3
2	124	1.7
3	133	2.3
4	137	2.5
5	235	4.3



Thank you for your attention!