

Design & Implementation of Type System

Name: Qihui Li
Andrew ID: qihuil

Design:

Types & Features:

BaseAnnotation: It has feature source(string) and confidence(double). Source keeps track of the source file that the annotation is generated from. And confidence shows how confident an annotation is.

Question: It has feature QuesBaseAnno. Confidence of the BaseAnnotation equals one because we are 100% confident about the accuracy of the question.

Answer: It has features AnsBaseAnno and isCorrect(boolean). Different Answers have different confidences which will be calculated. After all the confidences of Answers are determined, you can pick the answers with top confidences according to the sorting result. IsCorrect indicates the correctness of the answer.

Token: It has feature TokenBaseAnno. The system will annotate each token span in each question and answer (break on whitespace and punctuation).

Ngram: It has features NgramBaseAnno and elements which are an FSArray of Type Token. The system will annotate 1-, 2- and 3-grams of consecutive tokens.

AnswerScore: It has features AnswerBaseAnno, scores(double) and answer which is the type Answer. The system will incorporate a component that will assign an answer score annotation to each answer. The answer score annotation will record the score assigned to the answer.

Implementation:

Under TypeSystemDescriptor in eclipse GUI interface