11-791 HW2-REPORT

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1. Overview-frame

All classes
  packages:
    annotators:
      Classes: AnswerAnnotator
              AnswerScoreAnnotator
              EvaluationAnnotator
              NGramAnnotator
              QuestionAnnotator
              TokenAnnotator

Classes summarization:

AnswerAnnotator	Find Answer in the text and add Answer annotation.
	Input: test Doc Output: Answer Annotation
AnswerScoreAnnotator	Find Answer line and, calculate the score and add Answer Score annotation.
	Input: test Doc, Answer Annotation Output: Answer Score Annotation
EvaluationAnnotator	Print the Answers ordered by score and calculate the Precision.
	Input: test Doc, AnswerScore Annotation Output: Print Answers ordered by score, Score and Precision
NGramAnnotator	Find NGrams in the text and add NGram annotation
	Input: test Doc, Token Annotation Output: NGram Annotation
QuestionAnnotator	Find Question in the text and add question annotation.
	Input: test Doc Output: Question Annotation
TokenAnnotator	Find Tokens in the text and add Token annotation.
	Input: test Doc Output: Token Annotation

    edu.cmu.deiis.types:
      Classes: Annotation
              Annotation_Type
              Answer
              Answer_Type
              AnswerScore
              AnswerScore_Type
              NGram
              NGram_Type
              Question

Question_Type

Token

Token_Type

2. Class hierarchy

- o java.lang.Object
  - o org.apache.uima.analysis_component.AnalysisComponent_ImplBase   (implements org.apache.uima.analysis_component.AnalysisComponent)
    - o org.apache.uima.analysis_component.Annotator_ImplBase
      - o org.apache.uima.analysis_component.JCasAnnotator_ImplBase
        - o annotators.**AnswerAnnotator**
        - o annotators.**AnswerScoreAnnotator**
        - o annotators.**EvaluationAnnotator**
        - o annotators.**NGramAnnotator**
        - o annotators.**QuestionAnnotator**
        - o annotators.**TokenAnnotator**
  - o org.apache.uima.cas.impl.FeatureStructureImpl   (implements   java.lang.Cloneable, org.apache.uima.cas.FeatureStructure)
    - o org.apache.uima.jcas.cas.TOP
      - o org.apache.uima.jcas.cas.AnnotationBase   (implements org.apache.uima.cas.AnnotationBaseFS)
        - o org.apache.uima.jcas.tcas.Annotation   (implements org.apache.uima.cas.text.AnnotationFS)

edu.cmu.deiis.types.**Annotation**

- o edu.cmu.deiis.types.**Answer**
- o edu.cmu.deiis.types.**AnswerScore**
- o edu.cmu.deiis.types.**NGram**
- o edu.cmu.deiis.types.**Question**
- o edu.cmu.deiis.types.**Token**

  - o org.apache.uima.jcas.cas.TOP_Type
    - o org.apache.uima.jcas.cas.AnnotationBase_Type
      - o org.apache.uima.jcas.tcas.Annotation_Type

edu.cmu.deiis.types.**Annotation_Type**

- o edu.cmu.deiis.types.**Answer_Type**
- o edu.cmu.deiis.types.**AnswerScore_Type**
- o edu.cmu.deiis.types.**NGram_Type**
- o edu.cmu.deiis.types.**Question_Type**
- o edu.cmu.deiis.types.**Token_Type**

3. Component Descriptor Aggregation

NGramEngine:

Aggregate:

NGramAnnotaor, TokenAnnotaor

EngineFlow:

1: TokenAnnotaor

2:NGramAnnotator

HW2-YIS1-AAE:

Aggregate:

AnswerAnnotator

AnswerScoreAnnotator

QuestionAnnotator

TokenAnnotator

NGramAnnotator

EngineFlow:

1:QuestionAnnotator

2:AnswerAnnotator

3:NGramAnnotator

4:AnswerScoreAnnotator

5:EvaluationAnnotator