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Report for HW2: Design of logical architecture: (highlight the design and feature of the system)

The architecture contains 5 parts which come in sequence in the pepline:

QuestionAnnotator -> <u>Answer</u>Annotator-> <u>Token</u>Annotator-> <u>NGram</u>Annotator -> AnswerScoreAnnotator-> evaluatorAnnotator

As their name indicates, each annotator add certain types of annotators to the JCas.

Question Annotator: identified as the sequence between "Q" and "?", it includes the "?" in the end

Answer Annotator: identified as the sequence between "A 1/0" and ".", it includes the '.' in the end. The "1/0" is stored in an Boolean attribute called is Correct.

Token Annotator: for region annotated by the previous two annotators, each word is annotated as a token.

NGram Annotator: within a question or answer annotation range, 1-, 2-, 3-Gram are annotated based on the token annotation.

AnswerScore Annotator: for each answer, the score is calculated by (NGram overlapped with question)/(total NGram number).

evaluatorAnnotator: rank all the AnswerScore Annotator by score, calculate precision, and print to stdout.