Stage one: Become familiar with the semantic groups and types of the underlying models and the results of automatic annotation.

Overview Explanation Annotation Projects ▾

Kardiologie

Please first login in and then select the document ID   1.

maximilian.klass@med.uni-heidelberg.de × ▾   •••••••• ✓   Login   2.

Annotation Visualization by Semantic Groups

Select Section
○ Befunde
◉ Diagnosen
○ Zusammenfassung   3.

Progress
Befunde
Diagnosen
7.33
Zusammenfassung

● Physical Object
● Conceptual Entity
● Activity
● Phenomenon or Process
● Health State
● Factuality
● Temporal   6.

Check type definitions

Document IDs   1   13   106   109   119   132   133   150   164   165   172   4.

4
-UNK- Z.n . Gradient im LVOT von maximal 65 mmHg unter Valsalva -LRB- TTE v. <[Pseudo] 07/2028 >-RRB-

5
- Koronare Herzerkrankung ohne höhergradige Stenosen -LRB- B-OTHER vom <[Pseudo] 05/11/2015 >-RRB-   5.

6
- Z.n. tiefer Beinvenenthrombose links und Lungenembolie <[Pseudo] 2004>

1. Select the annotation project.
2. Login with user email and password.
3. Select the section to retrieve the corresponding text in the documents.
4. Switch the document ID to show the text of the selected section in each document.
5. Review the multi-layer entity annotations for seven different semantic groups listed on the left.
6. Click the [Check type definitions] button to learn more about each semantic type in different groups.

Stage two: Sentence-by-sentence modification of semantic type annotations for selected section and document.

Select Section
○ Befunde
◉ Diagnosen
○ Zusammenfassung

Progress
Befunde
Diagnosen
7.33
Zusammenfassung   9.

Annotation Visualization by Semantic Groups

● Physical Object
● Conceptual Entity
● Activity
● Phenomenon or Process
● Health State
● Factuality
● Temporal

Check type definitions

Document IDs   1   13   106   109   119   132   133   150   164   165   172   1.

6
- Z.n. tiefer Beinvenenthrombose links und Lungenembolie <[Pseudo] 2004>

7
- Z.n. Sigmoidektomie bei Sigmadivertikulitis <[Pseudo] 06/ 2015 >   10.

8
- Z.n. Hepatitis B -LRB- abgeheilt -RRB-

Inspect Semantic Type Scores and Annotate

Type score: Tokens score interpretation: Select the span by columns and semantic types by groups   Reselect columns   7.

Verletzung oder Vergiftung — - Hypertrophe , obstruktive Kardiomyopathie -LRB- Septumdicke max. 18 mm , TTE v. <[Pseudo] 05 / 2031 > -RRB-

Physiologische Funktion — - Hypertrophe , obstruktive Kardiomyopathie -LRB- Septumdicke max. 18 mm , TTE v. <[Pseudo] 05 / 2031 > -RRB-

Pathologische Funktion — - Hypertrophe , obstruktive Kardiomyopathie -LRB- Septumdicke max. 18 mm , TTE v. <[Pseudo] 05 / 2031 > -RRB-

Krankheit — - Hypertrophe , obstruktive Kardiomyopathie -LRB- Septumdicke max. 18 mm , TTE v. <[Pseudo] 05 / 2031 > -RRB-

Psychische oder Verhaltensstoerung - Hypertrophe , obstruktive Kardiomyopathie -LRB- Septumdicke max. 18 mm , TTE v. <[Pseudo] 05 / 2031 > -RRB-   4.

Physical Object Conceptual Entity Activity Phenomenon or Process Health State Factuality Temporal   3.

T037: Verletzung oder Vergiftung   T039: Physiologische Funktion   T046: Pathologische Funktion   T047: Krankheit   T048: Psychische oder Verhaltensstoerung   O: null   6.

5.

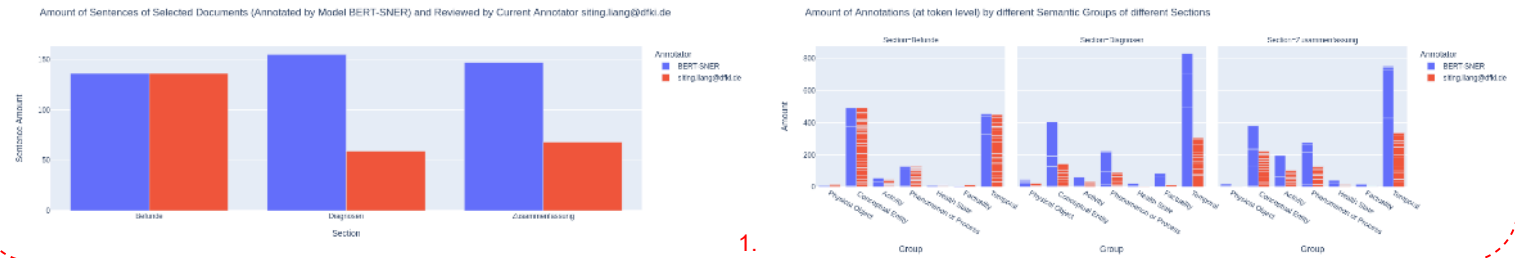| Semantic Groups	☑-	☑Hypertrophe	☐,	☑obstruktive	☑Kardiomyopathie	☐-LRB-	☐Septumdicke	☐max.	☐18	☐mm	☐,	☐TTE
Physical Object	0	0	0	0	0	0	0	0	0	0	0	0
Conceptual Entity	0	T184	0	T184	T184	0	T081	T081	T081	T081	0	0
Activity	0	0	0	0	0	0	0	0	0	0	0	0
Phenomenon or Process	T047	T047	T047	T047	T047	0	0	0	0	0	0	0
Health State	0	T301	0	0	0	0	0	0	0	0	0	0
Factuality	T401	T401	0	0	0	T401	T401	0	0	0	0	0
Temporal	0	0	0	0	0	0	T500	T500	T500	T500	T500	T

« 1 2 3 4 5 6 7 8 9 10 11 »   2.

Save   Save revision of section_Diagnosen document_13 to local file for current annotator maximilian.klass@med.uni-heidelberg.de .   8.

1. Select the document by ids.
2. Select one sentence from the text of the section of the selected document.
3. Change the semantic group for semantic type annotation revision.
4. Inspect the model prediction confidence for the preceding semantic types from the selected group.
5. Select one token (one column) or span (multiple columns) for annotation revision.
6. Select one semantic type to assign to the selected columns ("O:null" means no suitable semantic type).
7. Unselect the current columns.
8. Save the revision for the current document containing the selected section into local file.
9. Check annotation progress by sections.
10. Review the multi-layer entity annotations after revision sentence by sentence.

Stage three: Task overview and Realtime Classification Results

Task Overview

Amount of Sentences of Selected Documents (Annotated by Model BERT-SNER) and Reviewed by Current Annotator siting.liang@dfki.de

Amount of Annotations (at token level) by different Semantic Groups of different Sections

1.

Classification Results

Physical Object

label	precision	recall	f1-score	support
O	1.00	1.00	1.00	5449
T017	1.00	0.59	0.74	29
T074	1.00	1.00	1.00	11
T200	1.00	1.00	1.00	11
accuracy			1.00	5500
macro avg	1.00	0.90	0.93	5500
weighted avg	1.00	1.00	1.00	5500

Conceptual Entity

label	precision	recall	f1-score	support
O	1.00	1.00	1.00	4644
T079	1.00	1.00	1.00	270
T081	1.00	1.00	1.00	388
T184	1.00	1.00	1.00	185
T201	1.00	1.00	1.00	13
accuracy			1.00	5500
macro avg	1.00	1.00	1.00	5500
weighted avg	1.00	1.00	1.00	5500

Activity

label	precision	recall	f1-score	support
O	1.00	1.00	1.00	5312
T060	1.00	1.00	1.00	57
T061	1.00	1.00	1.00	131
accuracy			1.00	5500
macro avg	1.00	1.00	1.00	5500
weighted avg	1.00	1.00	1.00	5500

Phenomenon or Process

label	precision	recall	f1-score	support
O	1.00	1.00	1.00	5149
T039	1.00	1.00	1.00	13
T046	1.00	1.00	1.00	246
T047	1.00	1.00	1.00	86
T048	1.00	1.00	1.00	6
accuracy			1.00	5500
macro avg	1.00	1.00	1.00	5500
weighted avg	1.00	1.00	1.00	5500

2.

1. Click the "Task Overview" button to check the actual annotation progresses:
   left: number of sentences of the reviewed documents by sections.
   right: amount of saved annotations at token level in each semantic group.

2. Click the "Classification Results" button to inspect the real-time model classification results by semantic groups,
   taking the current annotator's annotations as ground truth.