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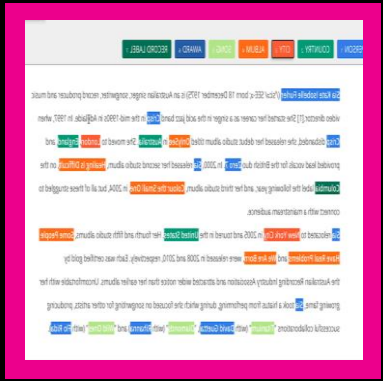

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A five-step approach to manually annotating unstructured data into training dataset for natural language processing

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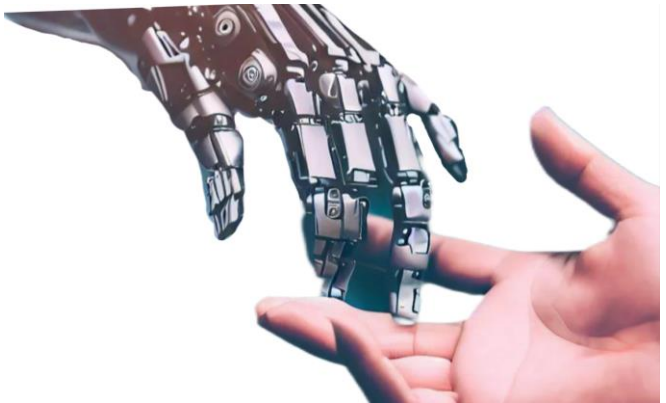
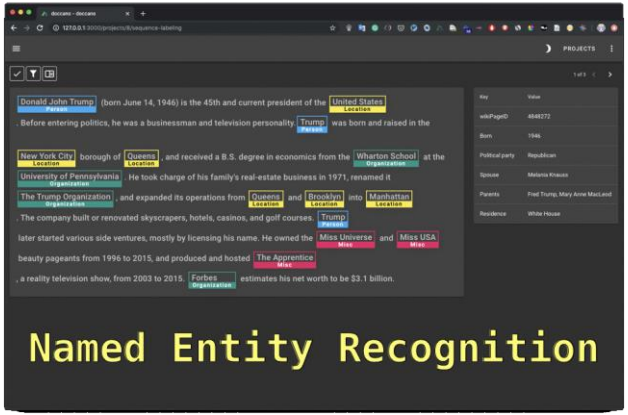
Introduction

Unlocking NLP Potential: The Power of Annotation



Objective

- to present *an approach for manually annotating unstructured data* into a training dataset specifically for natural language processing (NLP)

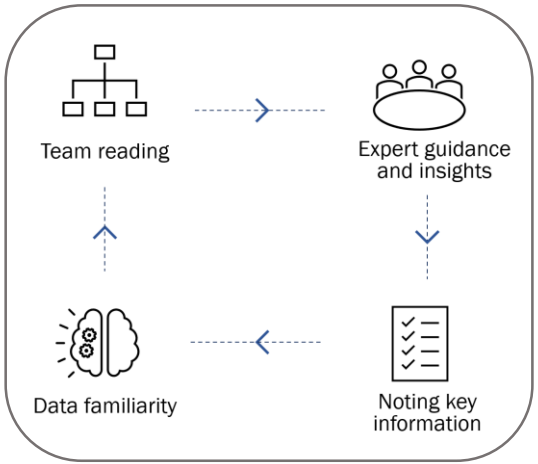


Significance

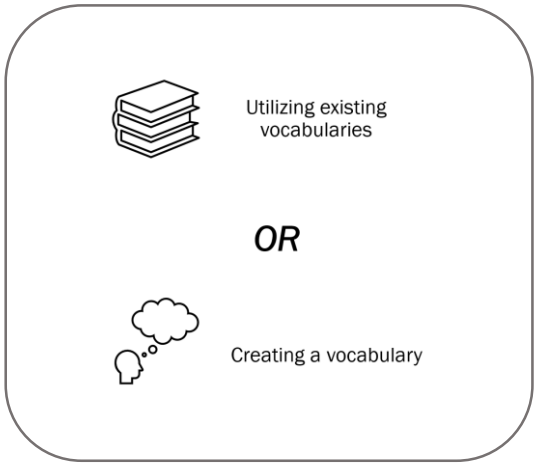
- Overcome **challenges of working with unstructured data** in NLP applications.
- Create **high-quality annotated training datasets** to enhance NLP model performance.
- Equip practitioners and researchers with **practical knowledge and tools for effective manual annotation**.
- Empower researchers to **contribute to NLP advancement** through annotated datasets.

The Five-Step Approach to Manual Annotation

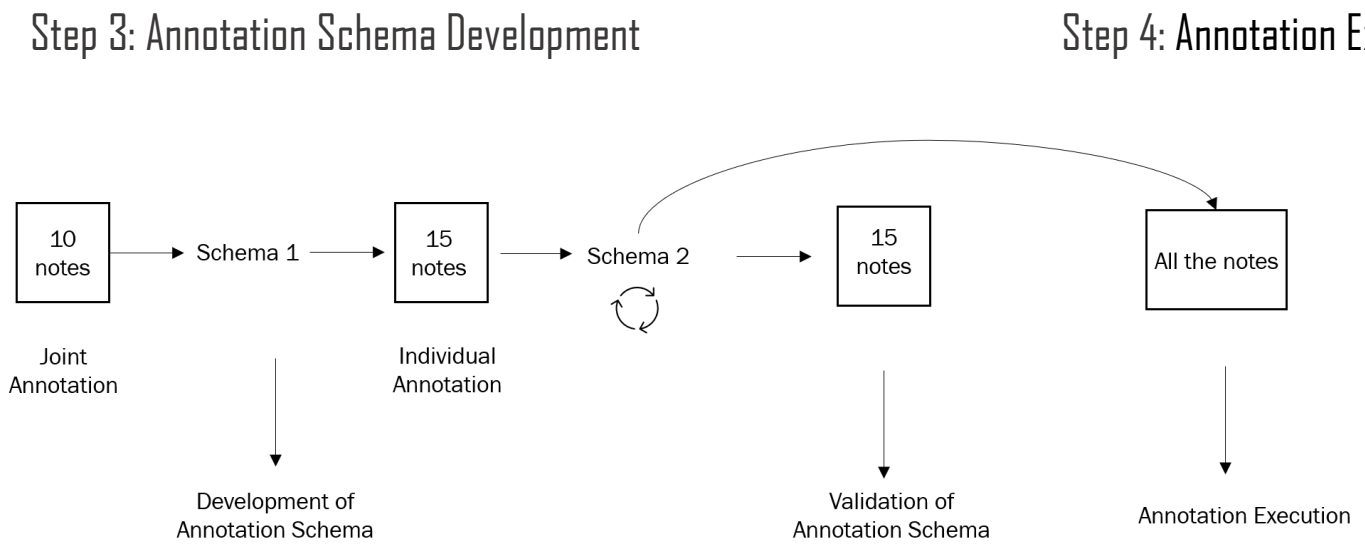
Step 1: Annotator Training



Step 2: Vocabulary Identification



The Five-Step Approach to Manual Annotation



The Five-Step Approach to Manual Annotation

Step 5: Result Validation

e.g., Inter-Annotator Agreement (Kappa statistics)

F-score can be used to calculate the precision and recall value

Case Study

1 Data

4,445 residents' data from 40 residential aged care facilities (RACF).

2 Objective

To extract agitated behaviors from residents.

3 Results

Identified 67 agitated behaviors.
F score: accuracy rate of 96%.

Conclusion

- **Summary:** The five-step approach provides a systematic and effective way to manually annotate unstructured data for NLP.
- **Significance:** improved model accuracy, better generalization, and the ability to address specific NLP tasks with tailored annotations.
- **Limitation:** The annotation task was time-consuming and had the potential to cause annotator fatigue.

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