

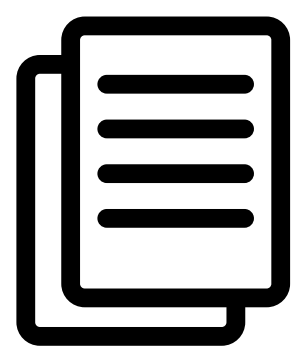
Overview of some Computational Linguistics Challenges Addressed at EDF Commerce

Goal



Leveraging recent advances in computational linguistics to improve the client-advisor relationship and internal processes

Textual Data



Variety:

- e-mails, tweets
- advisor comments, satisfaction survey comments
- client-advisor dialogues

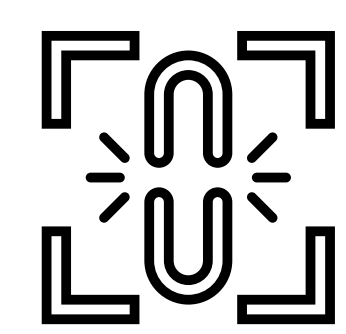


~ 5 million telephone calls
~ 160,000 e-mails
~ 42,000 tweets / month

Main Features



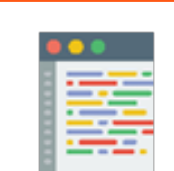
- French language
- "in-the-wild" data
- Lots of data. Few annotations.



Operational constraints:

- "Real time" processing
- High requirements in model performance
- Law compliance (GDPR)

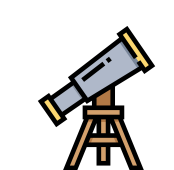
Main Tasks



Data annotation and quality



Text cleaning and normalisation



Topic discovery & identification



Classification



Text mining, information extraction



Sentiment analysis and opinion mining

Some Use Cases



Automation



Monitoring and reporting

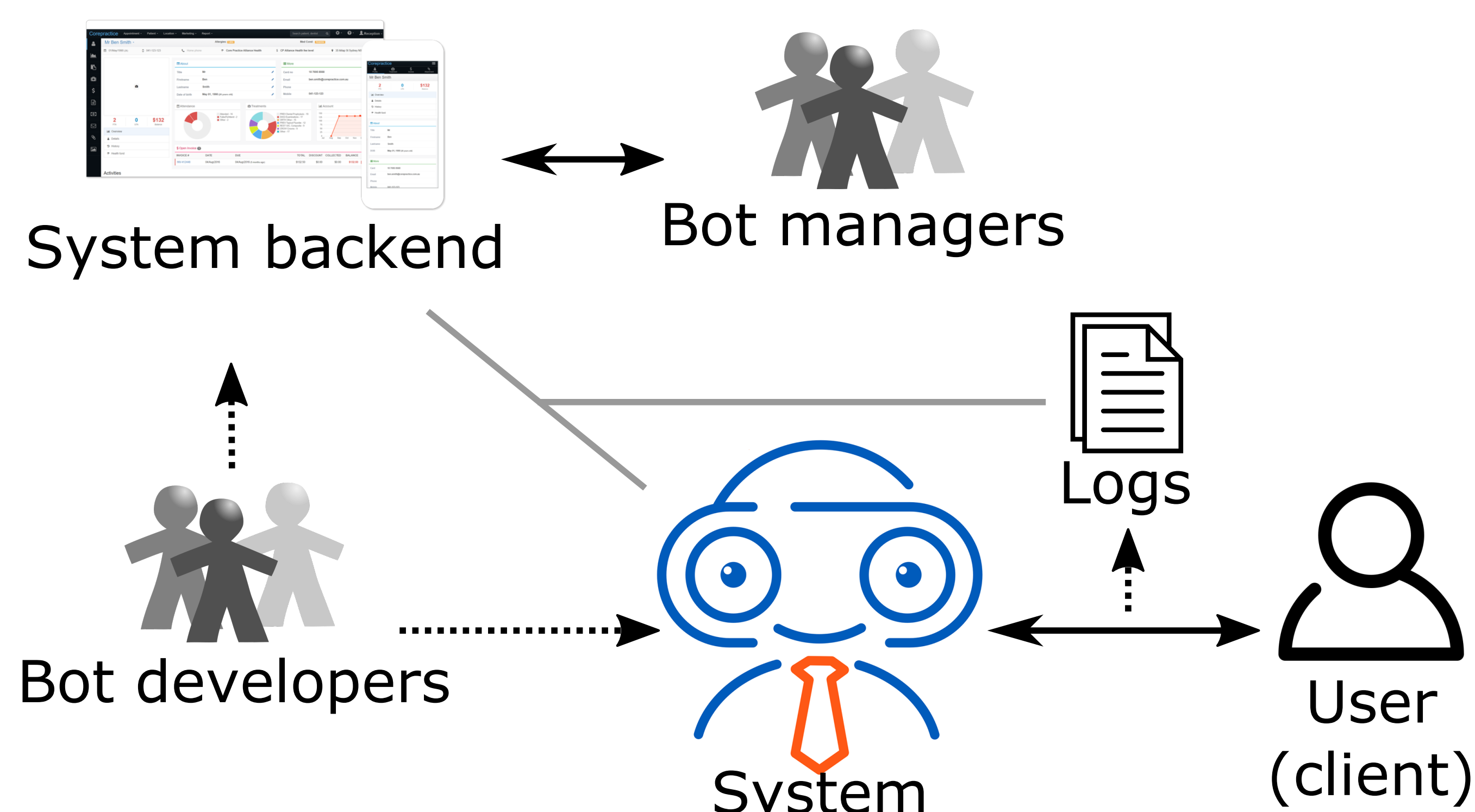


Priorisation and routing

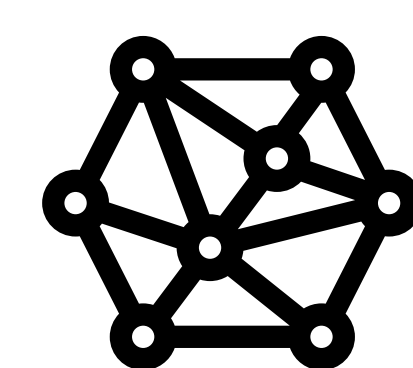


Advisor assistance

Interactive Dialogue Systems

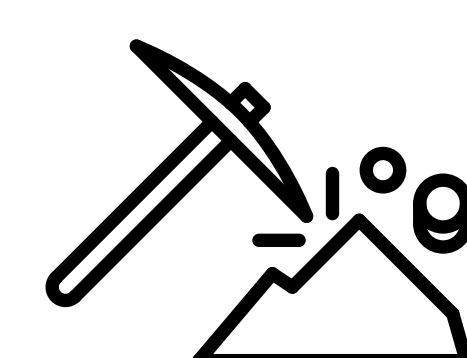


Some Challenges



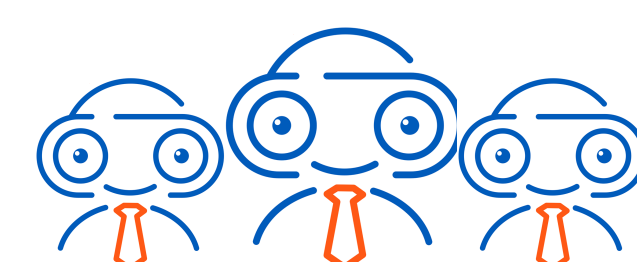
Dialogue modelling

- choosing the right approach
- content authoring
- adaptation to the customer



Dialogue log mining

- evaluation
- analyses and optimisation



Dealing with an ecosystem of bots

Contact Information