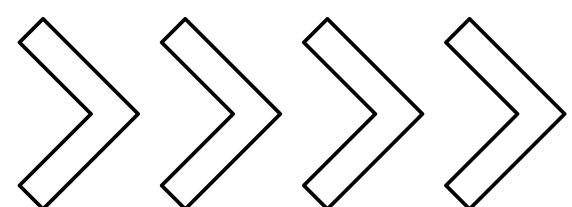


WORDIFY- CHECKPOINT 2

WEB SEMANTICS AND
LINKED DATA



Group D:

Fábio Araújo de Sá (up202007658@up.pt)

Marcos Rafael Peixoto Aires (up202006888@up.pt)

Pedro Pereira Ferreira (up202004986@up.pt)



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Context

Wordify is a system that disambiguates existing entities, possibly in different languages, using Web Semantics and Linked Data principles, concepts, and technologies.

It will help a computer and humans to perceive which entity is being referred to, if it is ambiguous in a certain context, or to consult false friends or regionalisms between languages.



wordify

Motivation

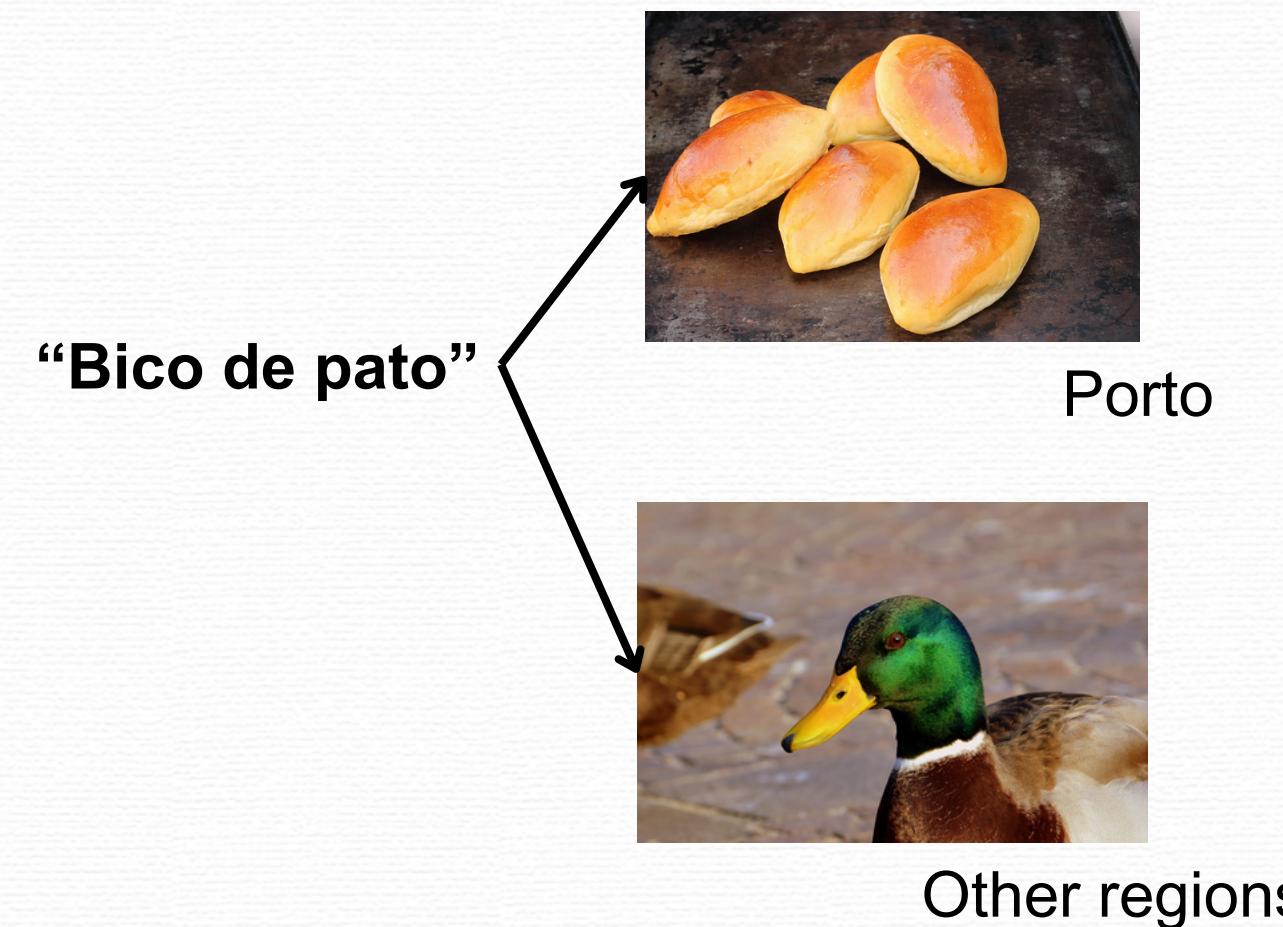
01 Disambiguate different contexts



02 Disambiguate different languages



03 Disambiguate different regionalisms



Porto
Other regions

Requirements

Globally, the system should be capable of:

- Linking various concepts to the entities being searched;
- Disambiguating concepts within and across languages;
- Consulting false friends and regionalisms of the entity, if they exist.

Adhering to the Linked Data Principles / Tim Berners-Lee's 4 Principles:

- Use Uniform Resource Identifiers (URIs) to identify resources;
- Use HTTP URIs so people can look up data;
- Provide useful information in standard formats (RDF);
- Include links to other URIs to connect data

Existing Approaches

➤ **DBpedia
Spotlight**



➤ **Wikidata Query
Service**



➤ **YAGO**



Knowledge base sources

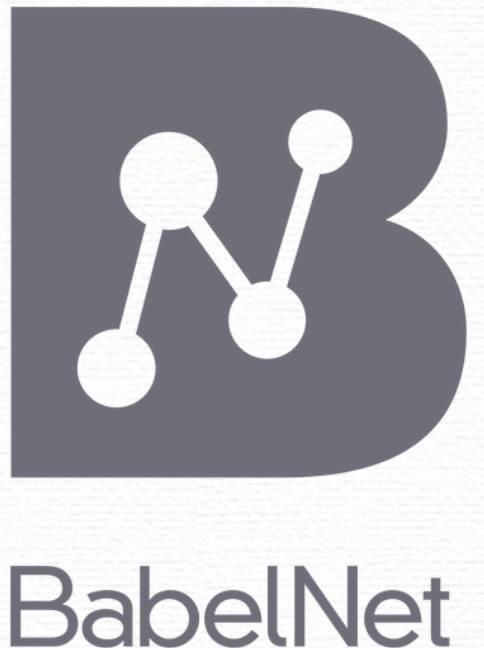
➤ **Wikidata**



➤ **DBpedia**



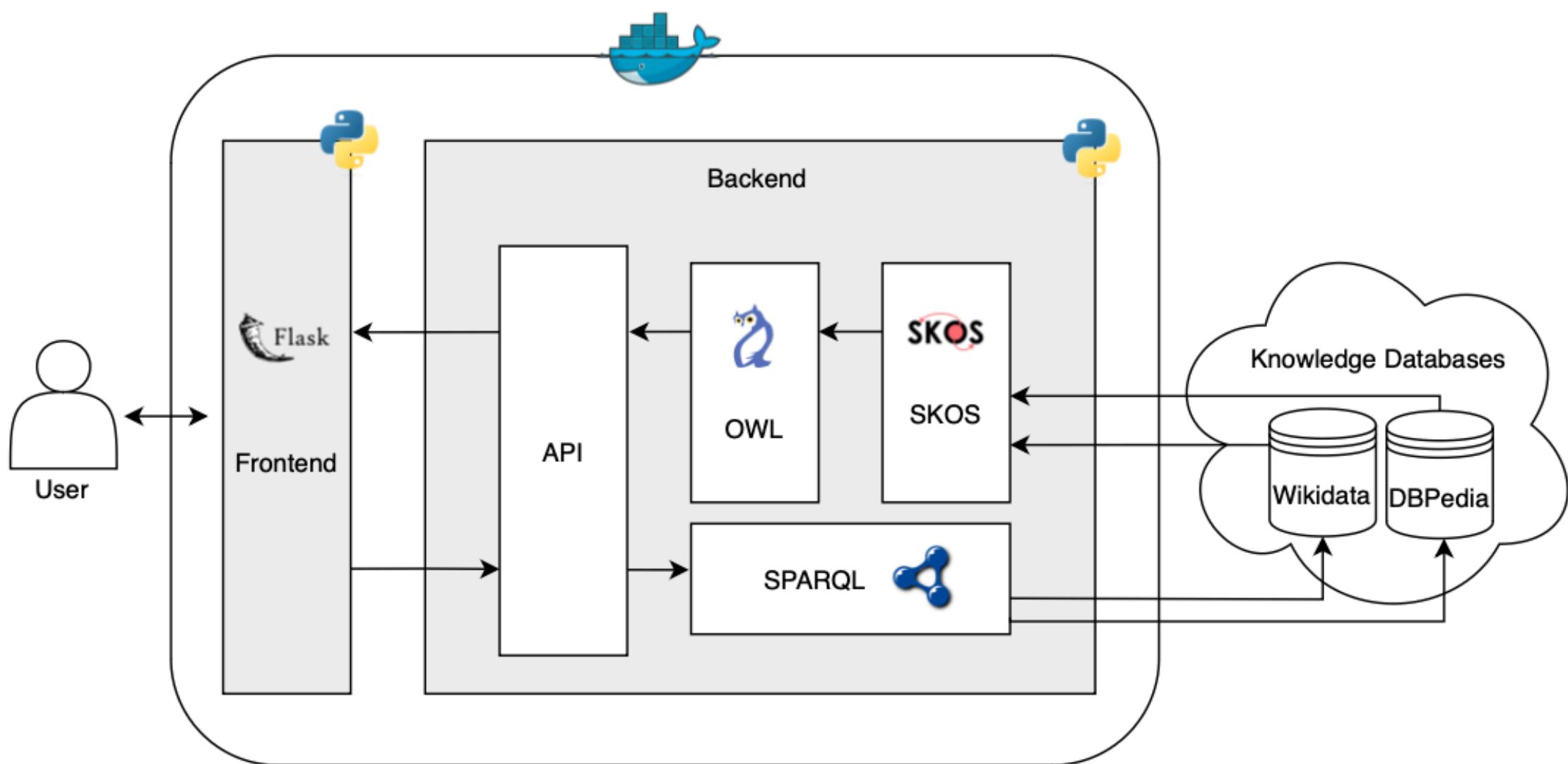
➤ **Babelnet(?)**



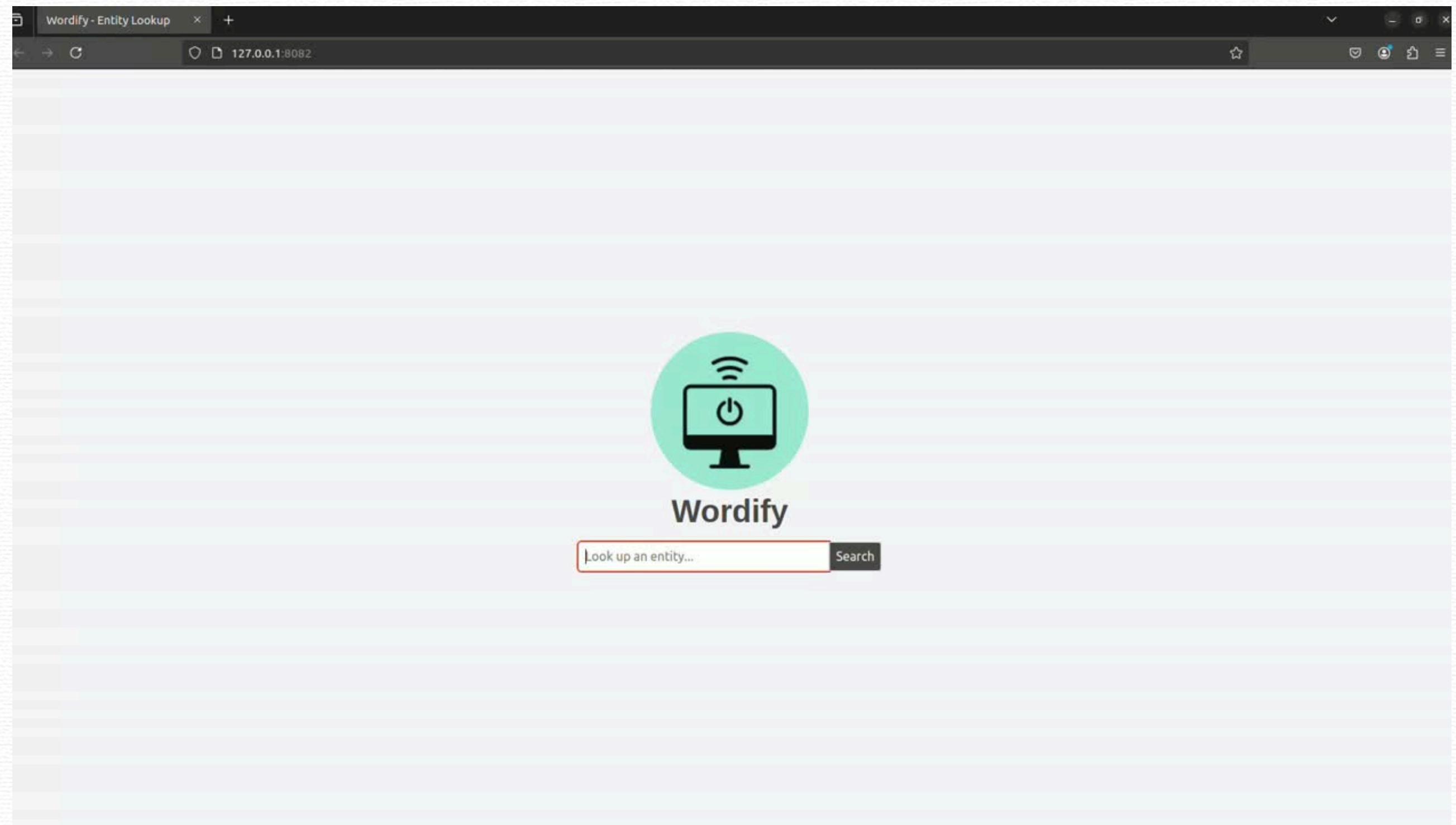
Challenges

- Vast number of potential entities that could be ambiguous, within and across different languages;
- There are instances where a word may exist in one language but cannot be automatically associated with another representation in another entity in a different language. For instance, "saudade" means missing someone in portuguese, but there is no direct english translation;

Architecture



Video demo



Thank you!