

EULAide: Ontology-driven Summarization and Visualization of Legal Documents

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Motivation

End user license agreements (EULAs) appear when installing a software or signing up for a web service. They are legally binding and thus should be read with caution, but because of their length and jargon, majority of users have a habit of clicking “I agree” on these documents without reading them. Possible consequences include: Privacy compromise, security risk and legal action against user

GOAL

Use ontology-based information extraction to facilitate a better understanding of EULAs.

Approach

Summarization

Show single terms and conditions in brief but comprehensible fashion

Classification

Group single terms and conditions into three key classes: Permission, Duty and Prohibition

Visualization

Provide understandable icons related to single terms and conditions

Technology



AngularJS for front-end JavaScript



Bootstrap for front-end design



Jersey for RESTful Web Service

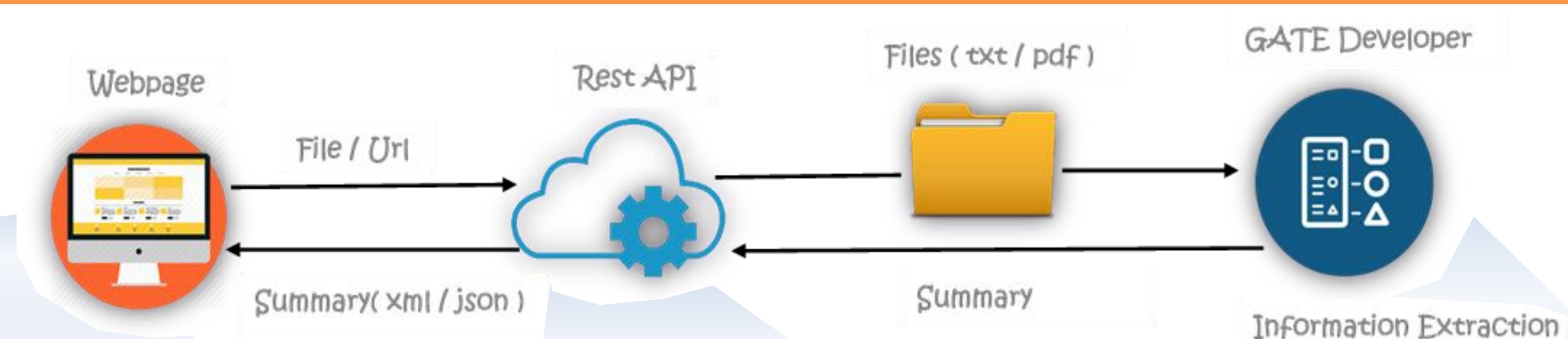


GATE for ontology-based information extraction



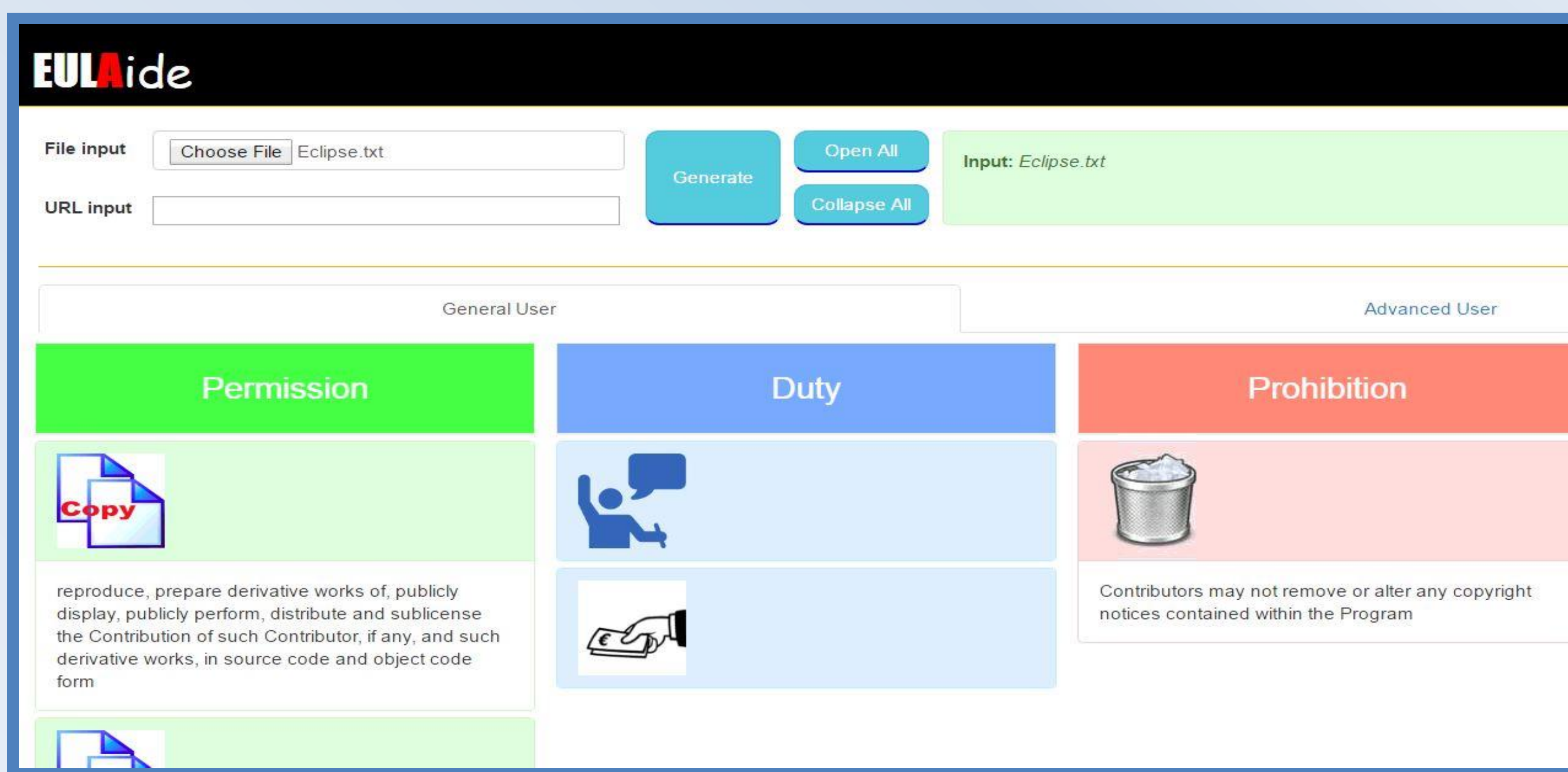
Jasmine & Postman for testing

EULAide



User Interface

- Simple user interface offering two ways to upload EULAs (File, URL)
- Offering two ways to view summary: general user (with icons) and advanced user
- Showing input file status
- Option to view selected parts or whole summarized EULA



Back-end

REST SEI

POST /eula/fileUploadXML

Param : multipart/form-data
Response : application/xml

POST /eula/fileUploadJSON

Param : multipart/form-data
Response : application/json

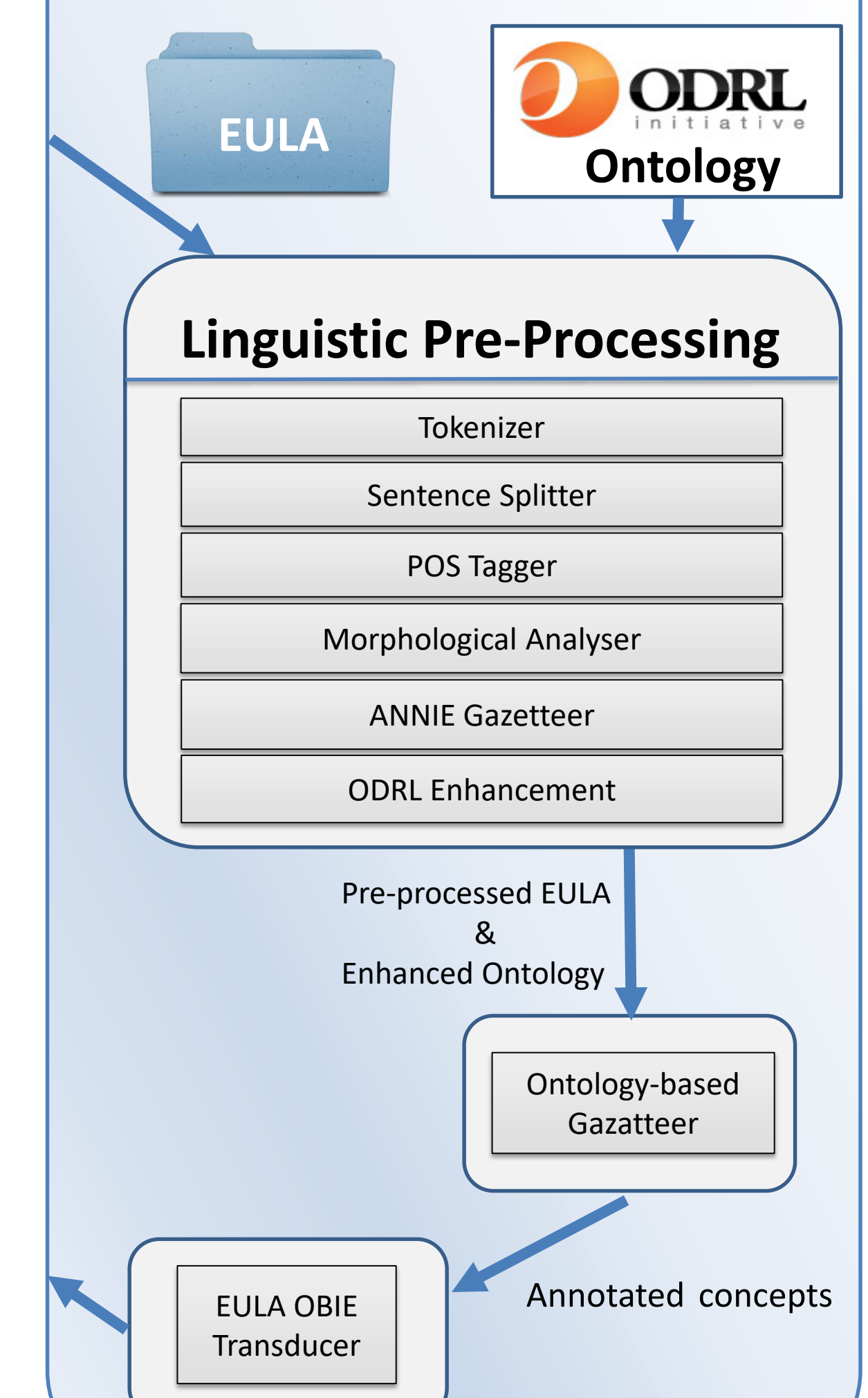
POST /eula/urlUploadXML

Param : text/plain (URL)
Response : application/xml

POST /eula/urlUploadJSON

Param : text/plain (URL)
Response : application/json

GATE IE



Future Work

- Offering different customized ontologies to achieve good results in various legal areas
- Support of additional languages
- Development of an app for the major mobile operating systems



Workstation



Hostname: vm-Windows16-EULA

Software installed: Installed on: EIS3
Eclipse Neon, Apache Tomcat 9, GATE 8.1

Local Access:

OS User: eis-user
Password: E1sUserEULA

Remote Access:

Partner ID: 273956668
Password: E1sUserEULA