



the LORD OF THE RINGS  
the FELLOWSHIP  
OF THE RING

Team OpenEdu B



**Ceylan**  
Scrum Master



**Mascha**  
Backend



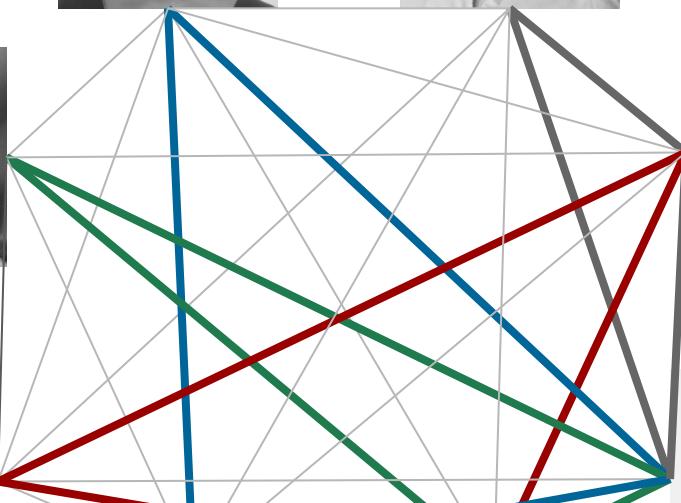
**Elena**  
UX/UI Design



**Michal**  
Data Scientist  
(Tech Lead)



**Noëline**  
Data Scientist  
(NLP)



**Andrina**  
Product Owner



**Maria**  
Team Satellite

**Sofia**  
Data Scientist

# How can we bring the Wiki Universe into every classroom & learning space?



# How can we bring the Wiki Universe into every classroom & learning space?



# OpenEdu

Where educators find out how to bring the Wiki universe into the classroom

**User Experience**

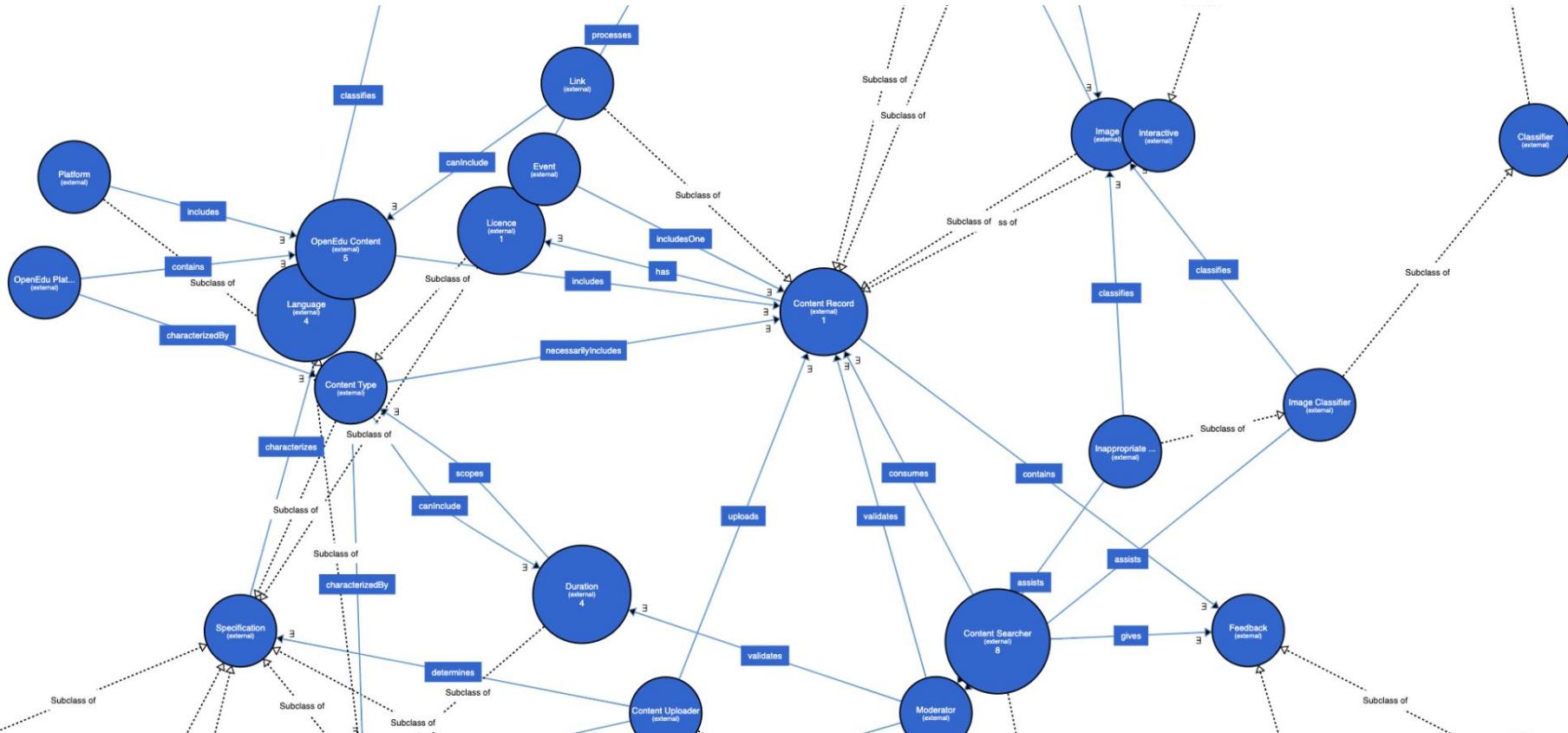
**Ontology**

**Automation  
(NLP)**

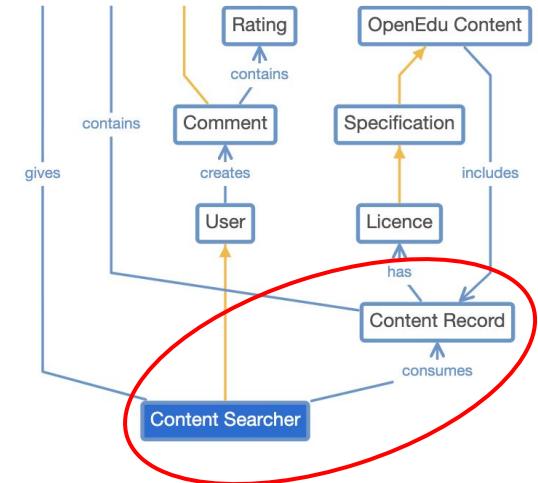
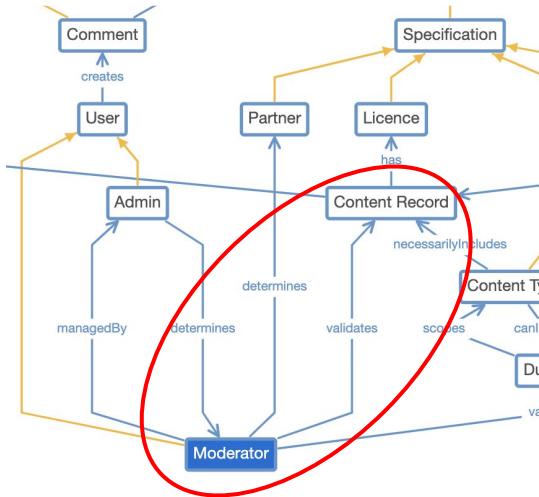
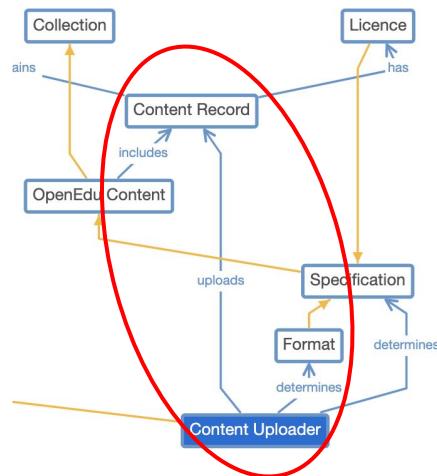
**Crawlers & Scapers**

**Architecture**

# Ontology



# Ontology: Users



**Content Uploader**  
Creates Content



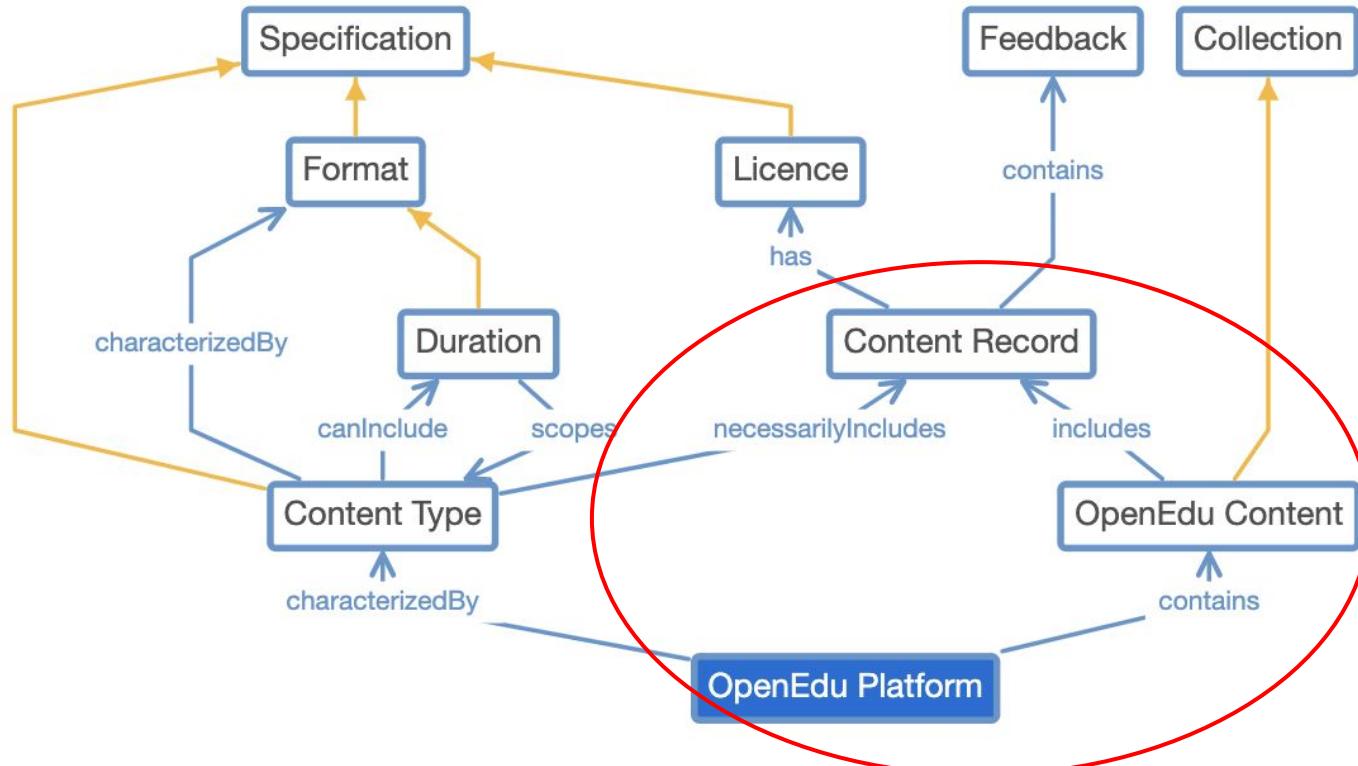
**Moderator**  
Validates Content



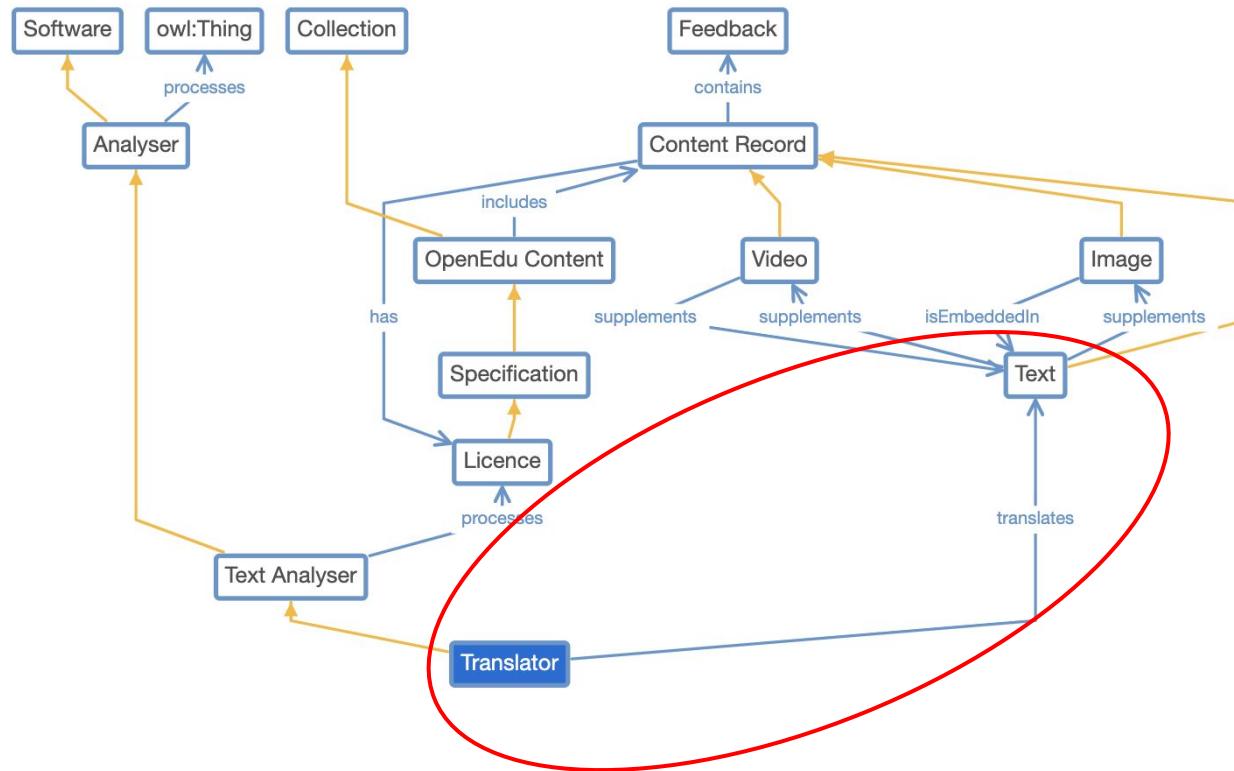
**End User**  
Consumes Content



# Ontology: Overview



# Ontology: Data Science



# Natural Language Processing (NLP)



The Content uploader writes the title and a description.



Title	language	text_en	text_fr	text_de	text_it	flesch	similar1	similar2	similar3
Commons	en	Wikimedia Commons, or simply Commons, is an on...	Wikimedia Commons, ou simplement Commons, est ...	Wikimedia Commons oder einfach Commons ist ein...	Wikimedia Commons, o semplicemente Commons, è ...	[college_graduate]	Evaluation Dashboard	WIKIDDHH	Wiki Loves Monuments
Wikipedia	en	The free encyclopedia that anyone can edit. Wi...	L'encyclopédie gratuite que n'importe qui peut...	Die kostenlose Enzyklopädie, die jeder bearbei...	L'encyclopédia gratuita che chiunque può modif...	[college_graduate]	WIKIDDHH	Wikipedia in Your University	Wiki Loves Monuments
Unesco OER Recommendation 2019	en	On 25th of November 2019, the 40th General Con...	Le 25 novembre 2019, la 40e conférence général...	Am 25. November 2019 verabschiedete die 40. Ge...	Il 25 novembre 2019, la 40a Conferenza general...	[college_graduate]	Wikiversity	Open Science Fellows Program	WikiEducator
Language		Translations			Readability Level		Similar contents		

# Natural Language Processing (NLP)



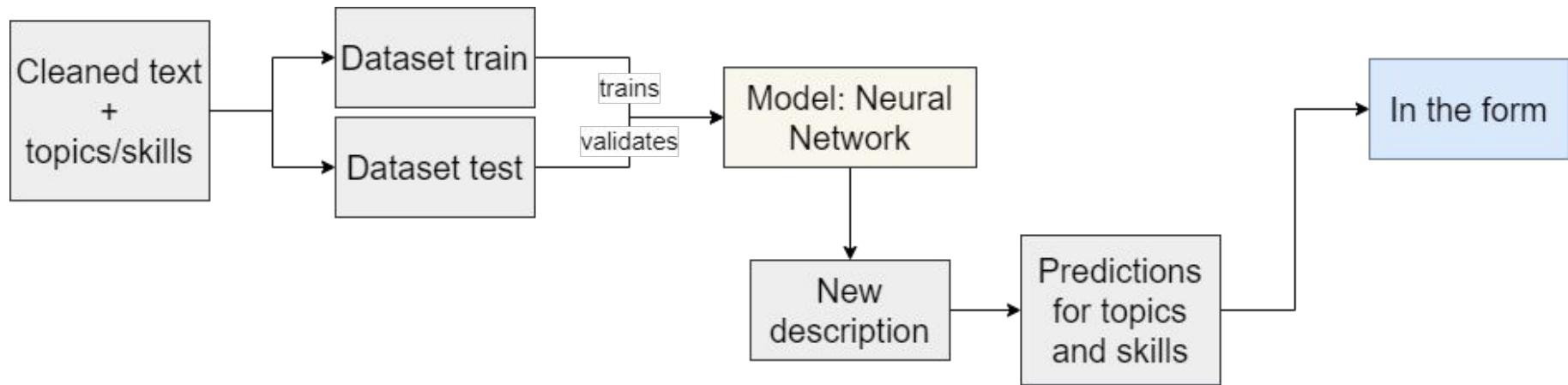
writes title and description



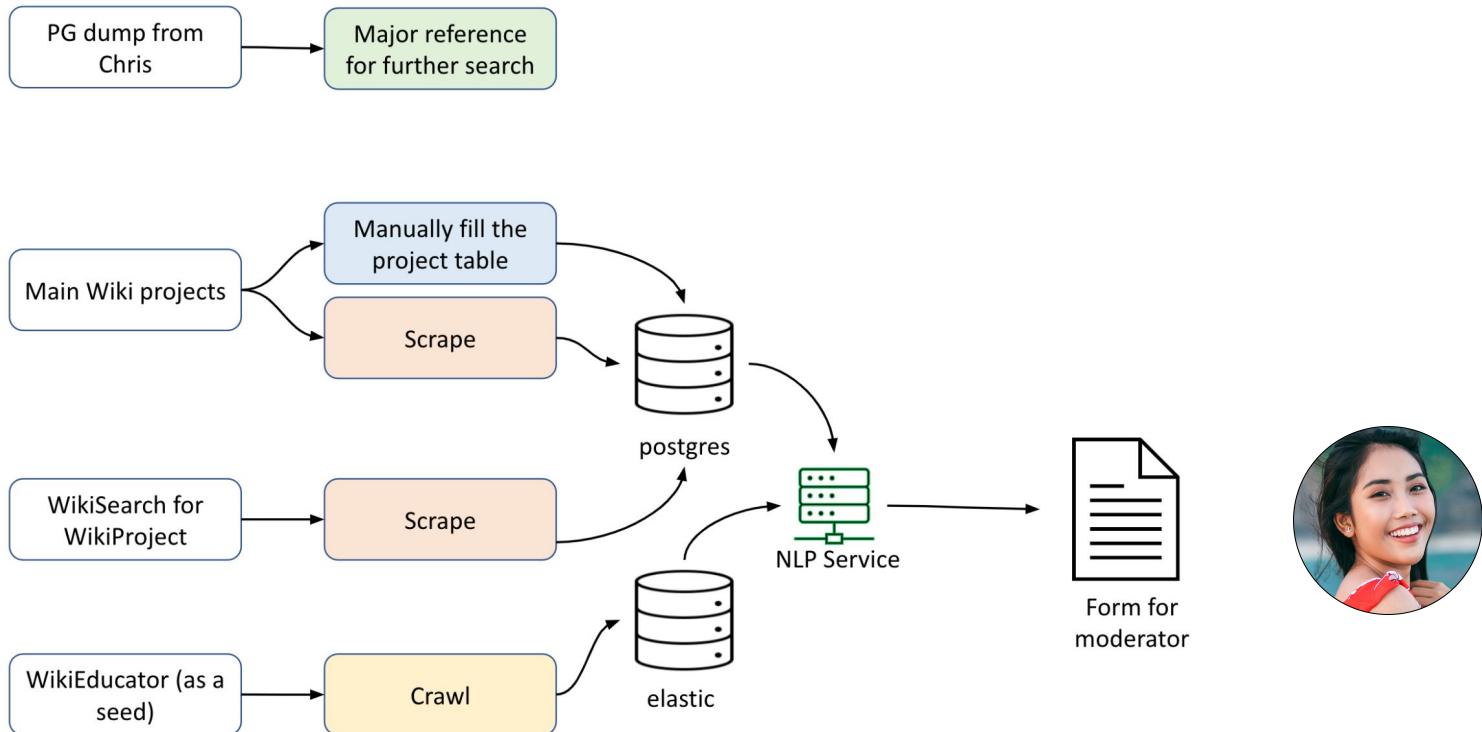
Title	language	text_en	text_fr	text_de	text_it	flesch	similar1	similar2	similar3
Commons	en	Wikimedia Commons, or simply Commons, is an on...	Wikimedia Commons, ou simplement Commons, est ...	Wikimedia Commons oder einfach Commons ist ein...	Wikimedia Commons, o semplicemente Commons, è ...	[college_graduate]	Evaluation Dashboard	WIKIDDHH	Wiki Loves Monuments
Wikipedia	en	The free encyclopedia that anyone can edit. Wi...	L'encyclopédie gratuite que n'importe qui peut...	Die kostenlose Enzyklopädie, die jeder bearbei...	L'encyclopédia gratuita che chiunque può modif...	[college_graduate]	WIKIDDHH	Wikipedia in Your University	Wiki Loves Monuments
Unesco OER Recommendation 2019	en	On 25th of November 2019, the 40th General Con...	Le 25 novembre 2019, la 40e conférence général...	Am 25. November 2019 verabschiedete die 40. Ge...	Il 25 novembre 2019, la 40a Conferenza general...	[college_graduate]	Wikiversity	Open Science Fellows Program	WikiEducator
Language		Translations		Readability Level		Similar contents			

# Machine Learning: “Advanced NLP”

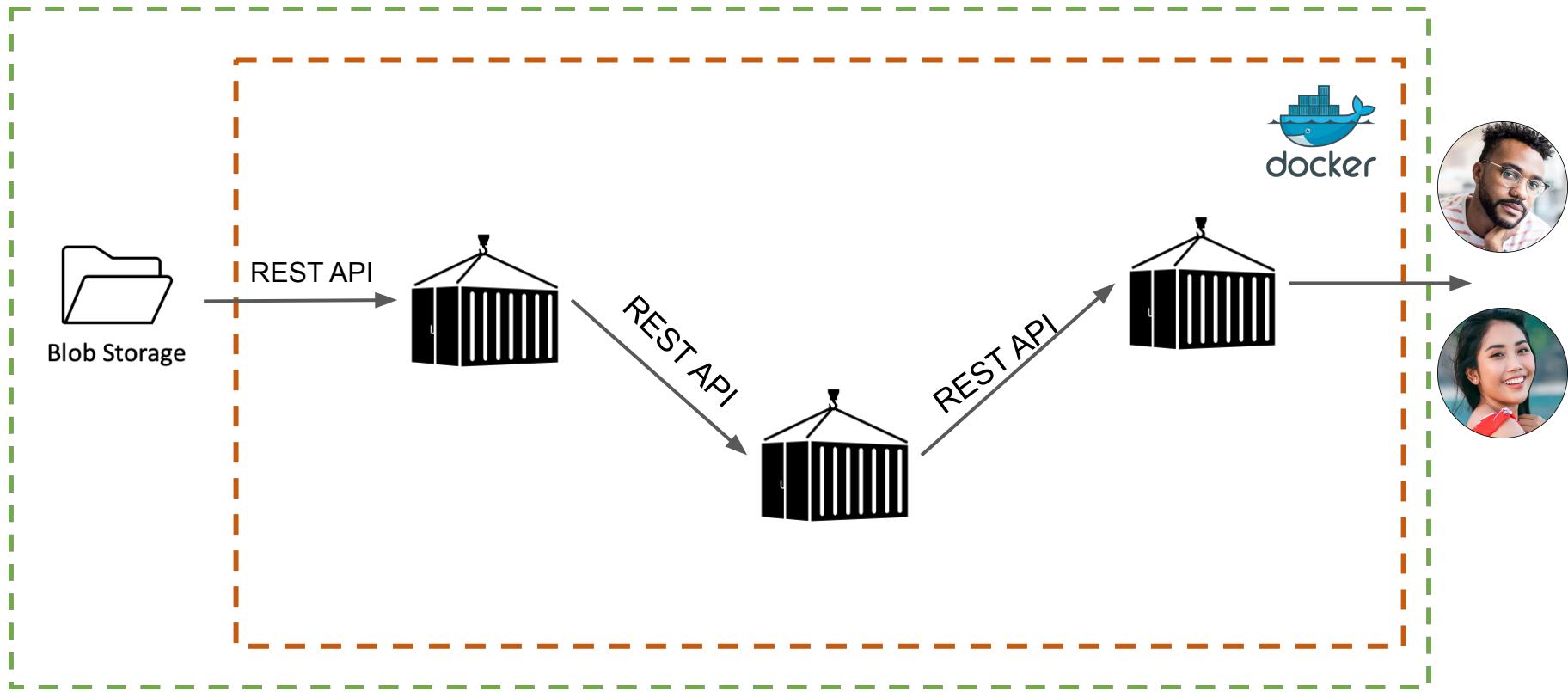
Future automation : Topics and Skills



# The Flow of Data

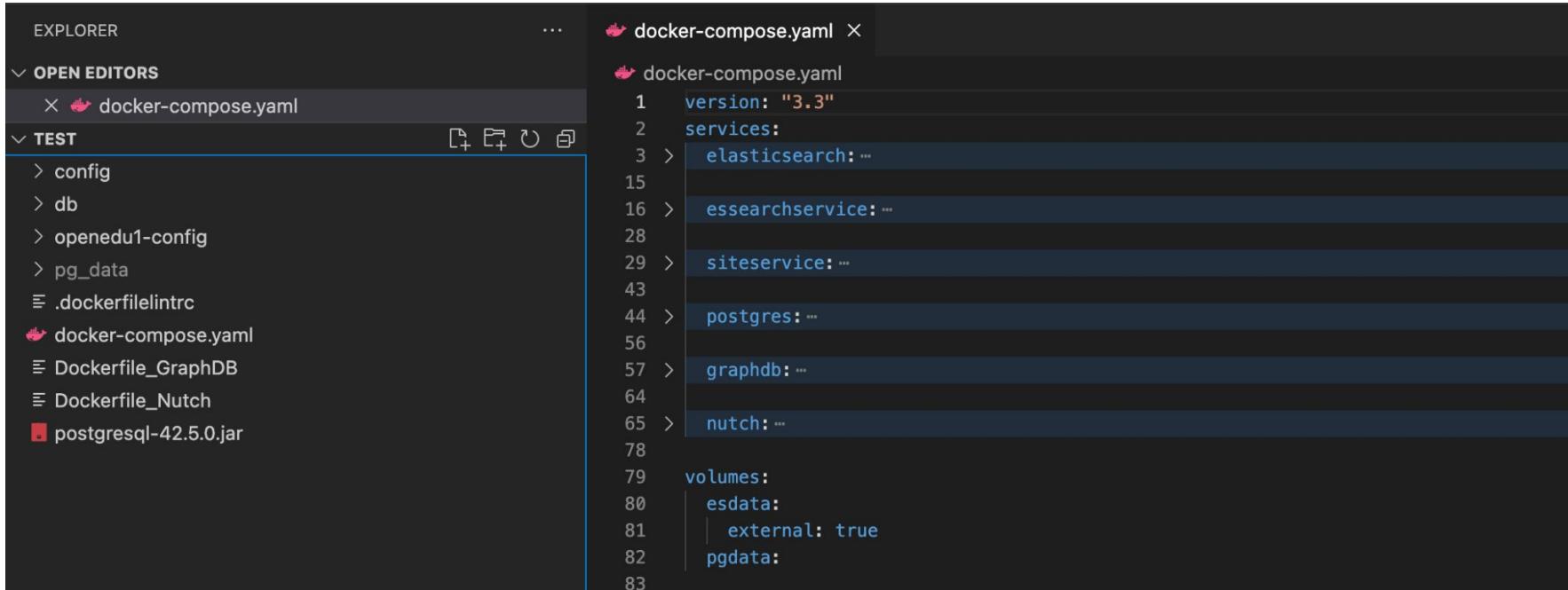


# Architecture: The Big Picture



# Architecture: The Containers

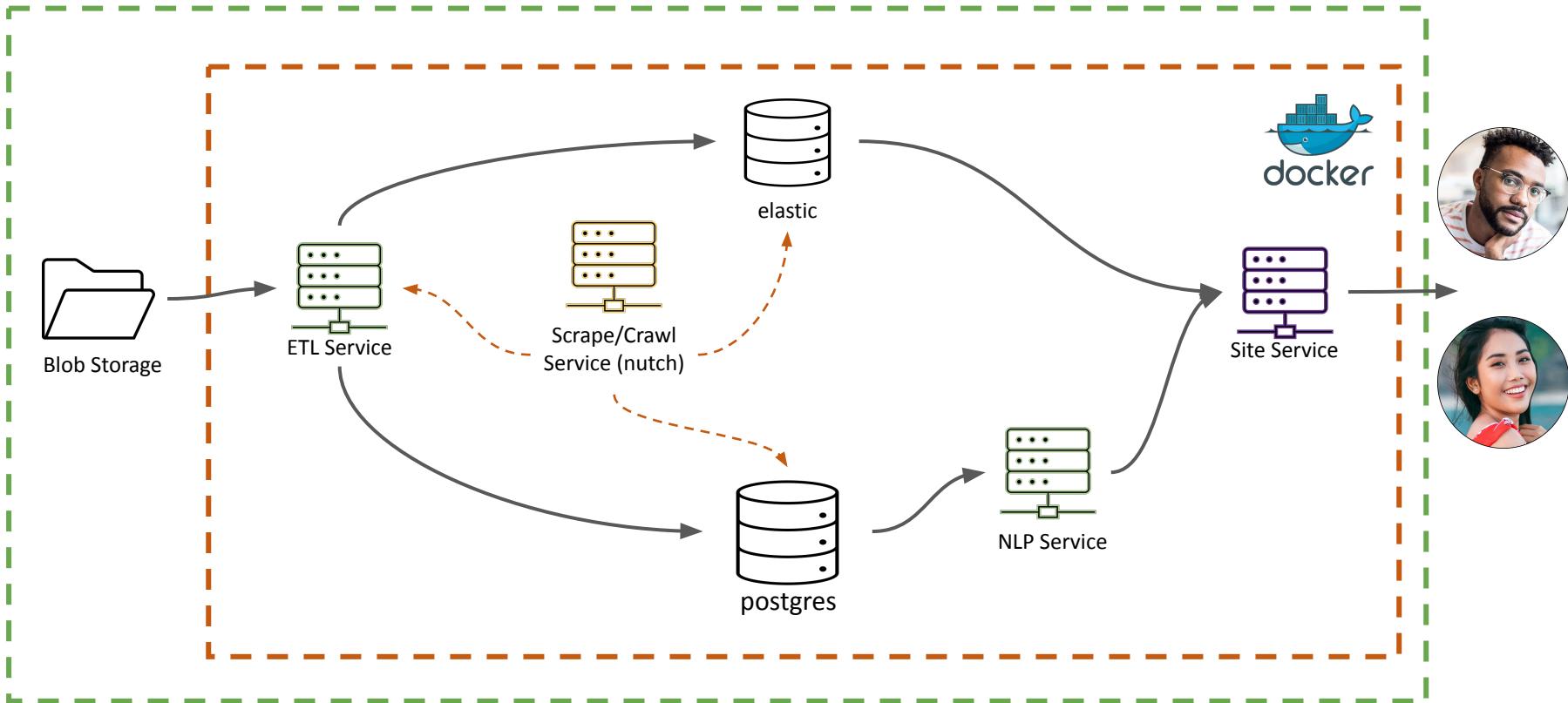
Microservice (MS) architecture packed into docker-compose



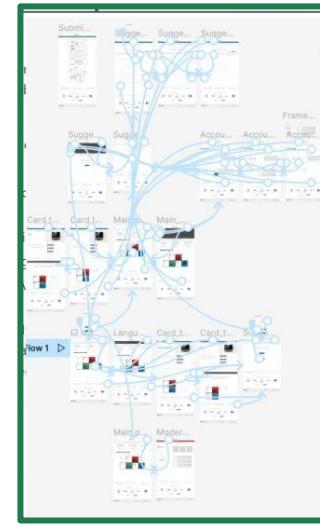
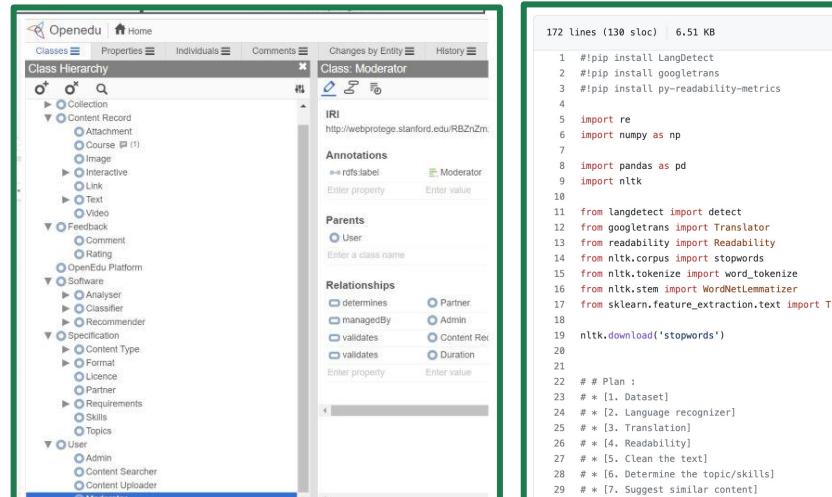
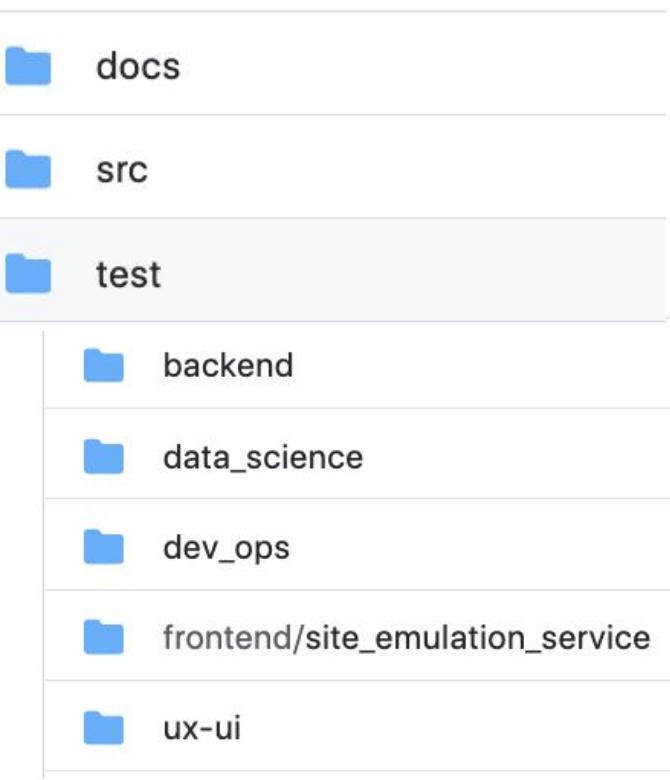
The screenshot shows a code editor interface with a dark theme. On the left is the Explorer sidebar, which lists several files and folders under the 'TEST' category: 'config', 'db', 'openedu1-config', 'pg\_data', '.dockerfilelintrc', 'docker-compose.yaml', 'Dockerfile\_GraphDB', 'Dockerfile\_Nutch', and 'postgresql-42.5.0.jar'. The 'docker-compose.yaml' file is currently selected and open in the main editor area. The editor displays the following YAML code:

```
version: "3.3"
services:
  elasticsearch: ...
  essearchservice: ...
  siteservice: ...
  postgres: ...
  graphdb: ...
  nutch: ...
volumes:
  esdata:
    external: true
  pgdata:
```

# Architecture: Container Connections



# Mission accomplished! - Documentation



# Bonus Suggestions

Training More Data

Detect Topics &  
Skills Automatically

Better  
Recommender  
System

Rating System

User Dashboards

# Our Learnings as a Fellowship



# Questions?

Figma Prototype:



Demo Website:





**Ceylan**  
Scrum Master



**Mascha**  
Backend



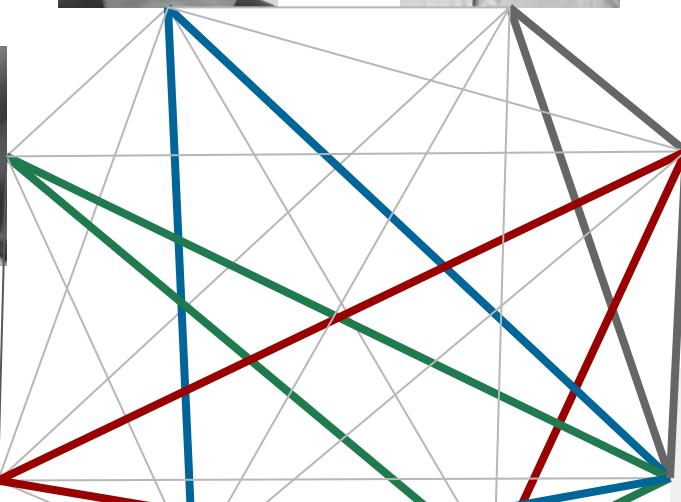
**Elena**  
UX/UI Design



**Michal**  
Data Scientist  
(Tech Lead)



**Noëline**  
Data Scientist  
(NLP)



**Andrina**  
Product Owner



**Maria**  
Team Satellite

**Sofia**  
Data Scientist