

# ARCHITECTURE ET MICRO-SERVICES

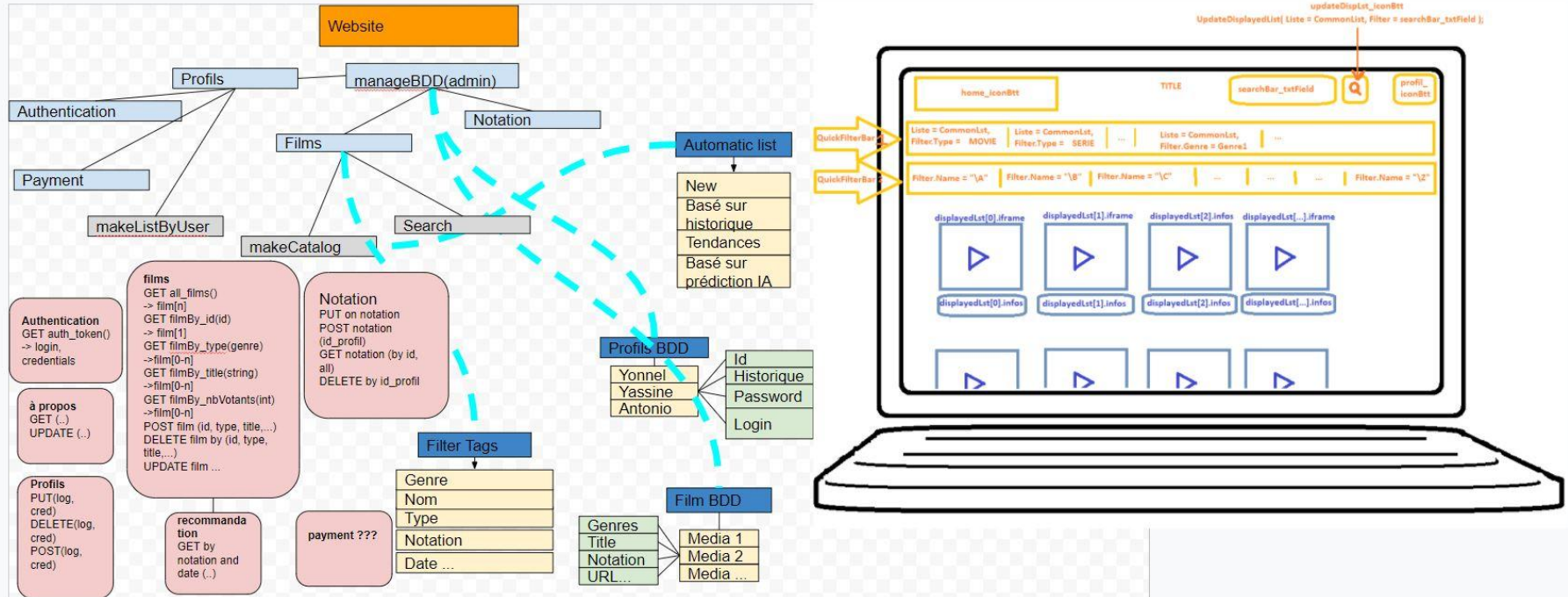
NETFLOUX



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# Schéma de notre architecture



# Technologies utilisées



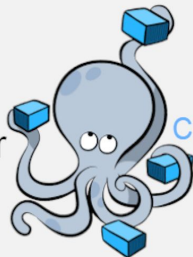
python



Flask

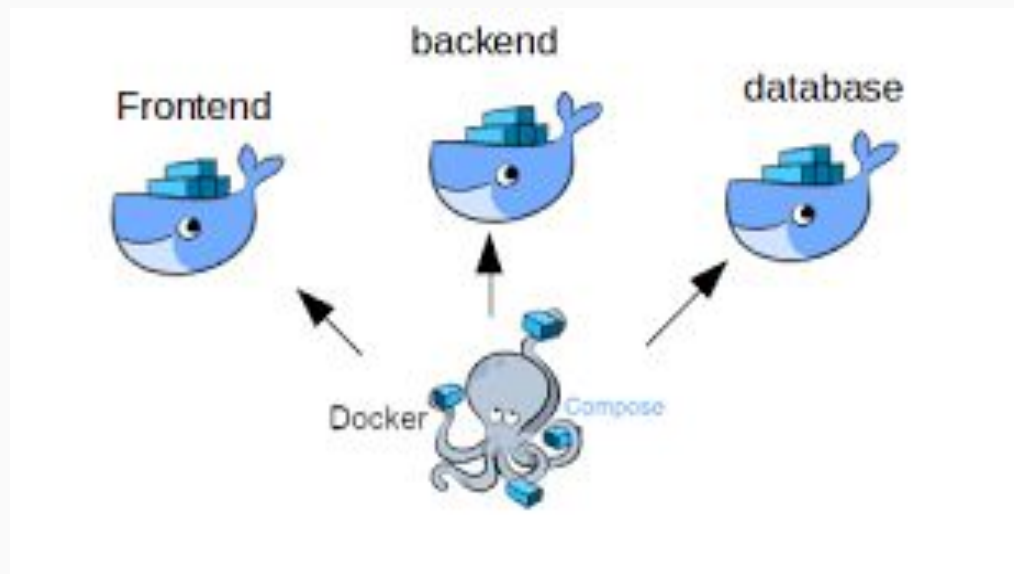
web development,  
one drop at a time

Docker

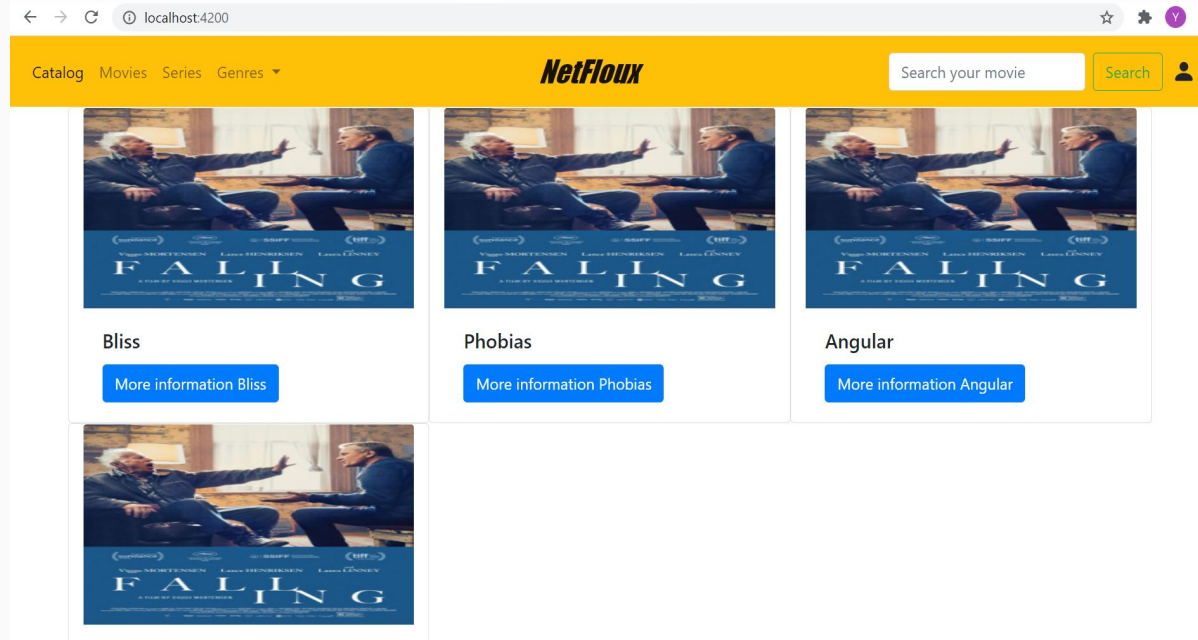


Compose

# Technologies utilisées



# Etat d'avancement



# Etat d'avancement

```
search_films_api.py - C:\Users\ynyokas\Documents\ESIEE cours\E5\ Docker & Microservices\projects\api\search_films_api.py (3.7.3)
File Edit Format Run Options Window Help
import flask
from flask import request, jsonify

app = flask.Flask(__name__)
app.config["DEBUG"] = True

# Create some test data for our catalog in the form of a list of dictionaries.
movies = [
    {'id': 0,
     'title': 'Coming 2 America Trailer',
     'url': 'https://www.youtube.com/watch?v=ackUNBg_7CM&ab_channel=MovieclipsTrailers',
     'synopsis': 'Prince Akeem returns to America to search for his long-lost son.',
     'genre': 'comedy',
     'type': 'movie',
     'date': '2021',
     'notation': '5'},
    {'id': 1,
     'title': 'Dune',
     'url': 'https://www.youtube.com/watch?v=4t7utI9yrsA&ab_channel=ONEMedia',
     'synopsis': 'La planète la plus importante de l\'univers, Arrakis, est également appelée "Dune". Une gigantesque
     'genre': 'sci-fi',
     'type': 'movie',
     'date': '2020',
     'notation': '4'},
    {'id': 2,
     'title': 'The White Tiger',
     'url': 'https://www.youtube.com/watch?v=2MuDvgtuiBI&ab_channel=MovieclipsTrailers',
     'synopsis': 'The epic journey of a poor Indian driver who must use his wit and cunning to break free from servit
     'genre': 'drama',
     'type': 'movie',
     'date': '2021',
     'notation': '3'}
]

#other functions
#####
def string_equal(string_1, string_2):
    if (string_1 == string_2) or (string_1+'s' == string_2) or (string_1 == string_2+'s'):
        return True
#####

#api functions
@app.route('/', methods=['GET'])
def home():
    return '''<h1>Web API for films search test</h1>
    <p>This web api is a test to check if we can access the films by
    searching by id, title, genre, type, release_data, notation, ...</p>'''

#get all
@app.route('/api/v1/resources/movies/all', methods=['GET'])
def api_all_movies():
    return jsonify(movies)

#get film by id
@app.route('/api/v1/resources/movies/film_by_id', methods=['GET'])
def api_movie_by_id():
    if 'id' in request.args:
        id = int(request.args['id'])
    else:
        return "Error: No id field provided or exceeding the number of films on the website."

    movies_links = []
```

```
127.0.0.1:5000/api/v1/resources/books?id=0
{
  "author": "Bernard Werber",
  "type": "science-fiction",
  "id": 0,
  "title": "Le fil de la saison",
  "year_published": "1992"
}

127.0.0.1:5000/api/v1/resources/movies/film_by_notation?notation=3.5
{
  "notation": "3",
  "synopsis": "Prince Akeem returns to America to search for his long-lost son.",
  "title": "Coming 2 America Trailer",
  "url": "https://www.youtube.com/watch?v=ackUNBg_7CM&ab_channel=MovieclipsTrailers"
}

127.0.0.1:5000/api/v1/resources/movies/film_by_id?id=1
{
  "notation": "4",
  "synopsis": "La planète la plus importante de l'univers, Arrakis, est également appelée 'Dune'. Une gigantesque lutte pour le pouvoir commence autour de celle-ci, aboutissant à une guerre interstellaire.",
  "title": "Dune",
  "url": "https://www.youtube.com/watch?v=4t7utI9yrsA&ab_channel=ONEMedia"
}
```

# Objectifs à atteindre

- Intégrer les web API créés avec Flask/SpringBoot dans des images Docker (Dockerfiles) et les connecter avec la BDD.
- Savoir utiliser les commandes PUT, POST et DELETE pour les web api Flask.
- Faire fonctionner notre architecture avec les images Docker (DockerCompose).
- Compléter le front-end pour gerer les futures améliorations.