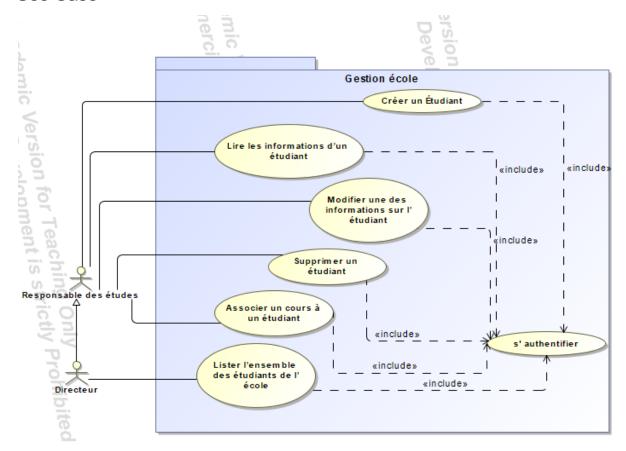
Projet client 16/03/2022

Projet client 16/03/2022	0
Diagrammes	6
Use Case	6
Activité	6
S'autentifier	7
Créer un étudiant	7
Modifier un étudiant	8
Supprimer un étudiant	9
Lire les informations d'un étudiant	10
Associer un cour à un étudiant	11
Lister tous les étudiants	14
Classe	14
Séquence	15
S'authentifier	15
Créer un étudiant	15
Modifier un étudiant	16
Supprimer un étudiant	16
Associer un cours à un étudiant	16
Lister les étudiants	16
Développement	16
Technologies utilisés	16
Back	16
Front	16
Ma base de données avec des données	16
Résultat des tests	17
Devops	18
Jenkins	18
Docker	20
Ansible	20
Terraform	20
Résultat sur le cloud AWS	20
Liens	20
Docker image	20
Git hub	21
projet	21
Déploiement	
https://github.com/Flav1-ann/course_deploy	0
AWS	0

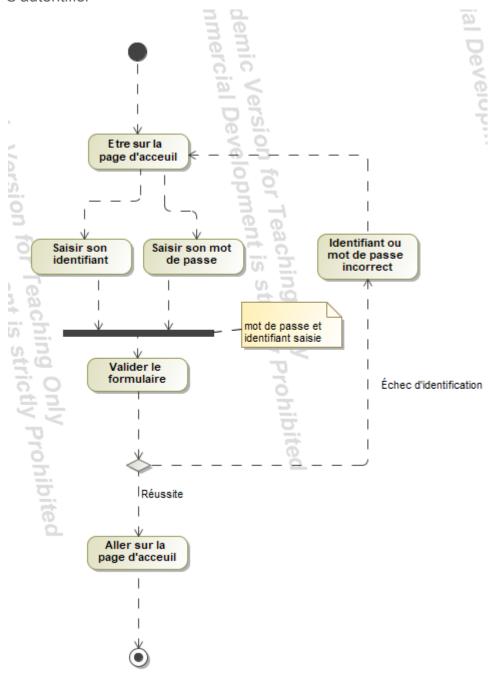
Diagrammes

Use Case

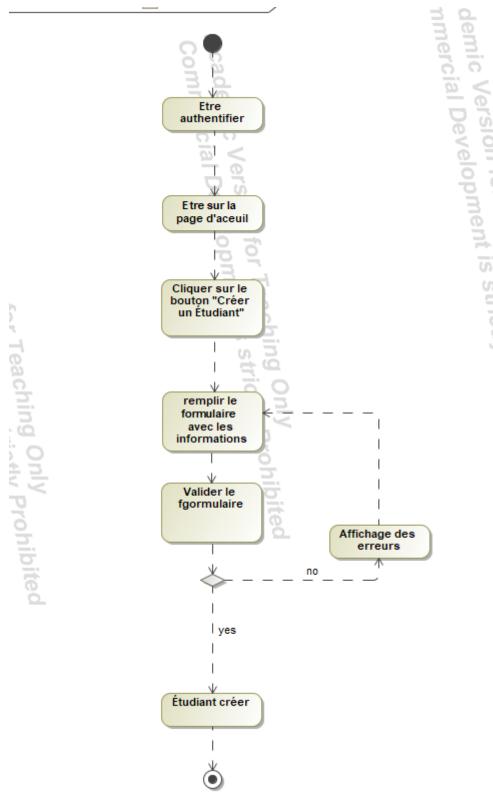


Activité

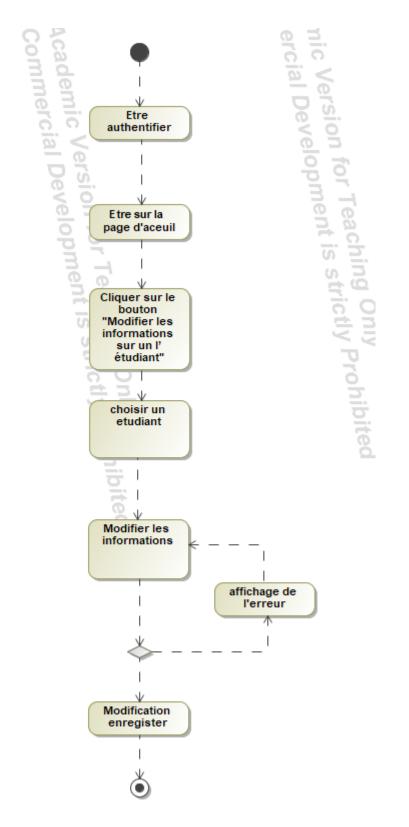
S'autentifier



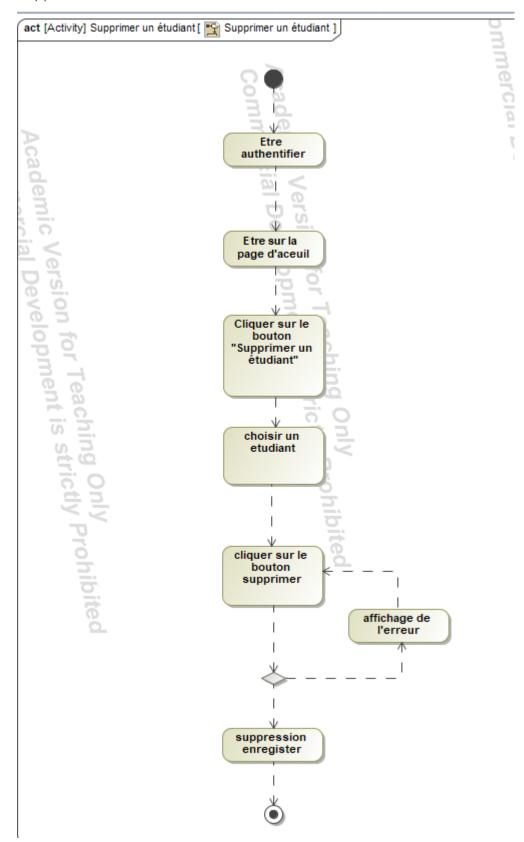
Créer un étudiant



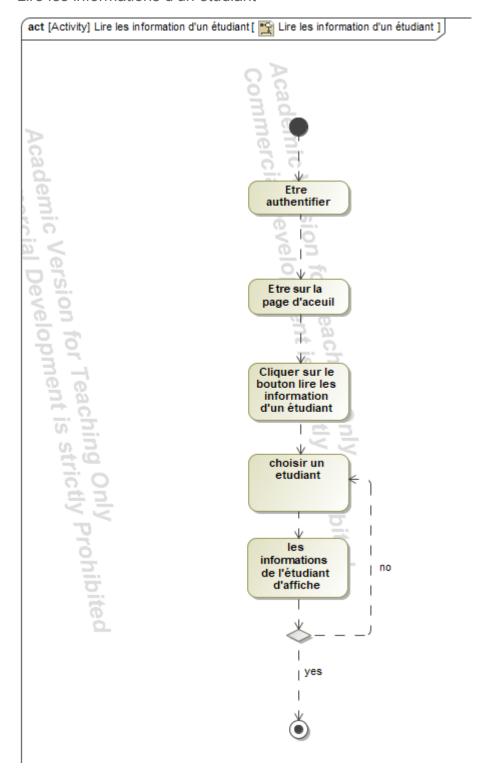
Modifier un étudiant



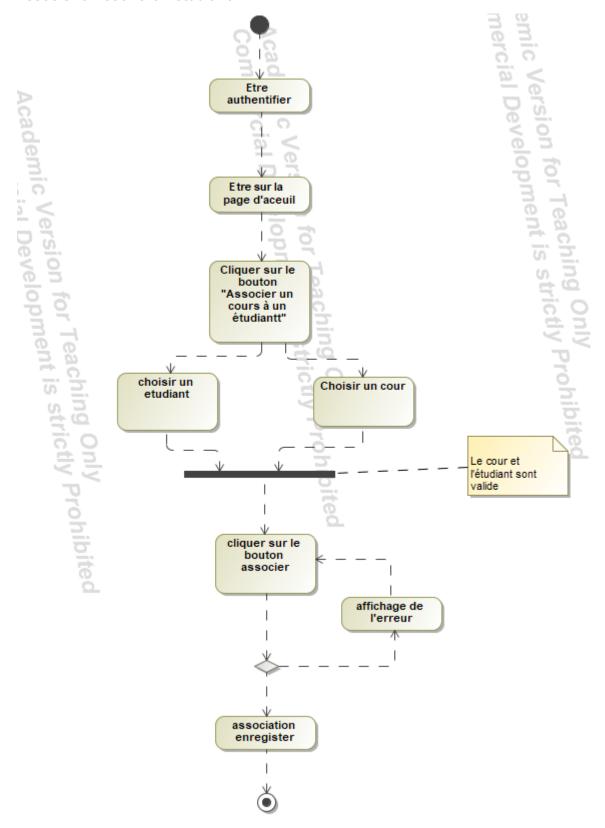
Supprimer un étudiant



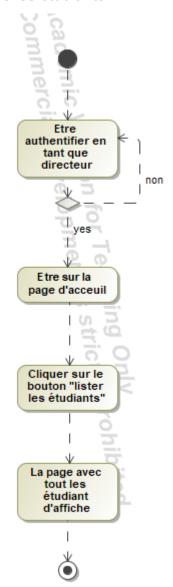
Lire les informations d'un étudiant



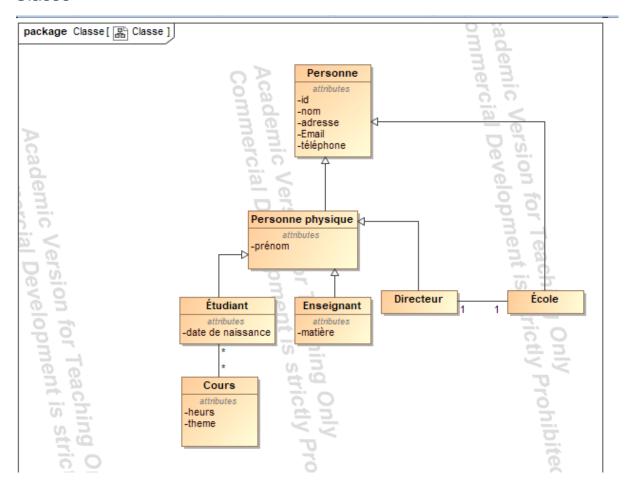
Associer un cour à un étudiant



Lister tous les étudiants

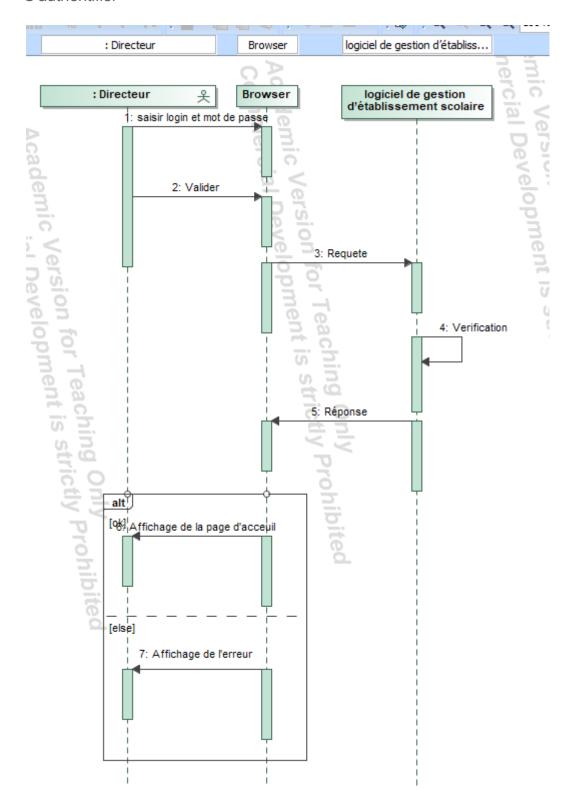


Classe

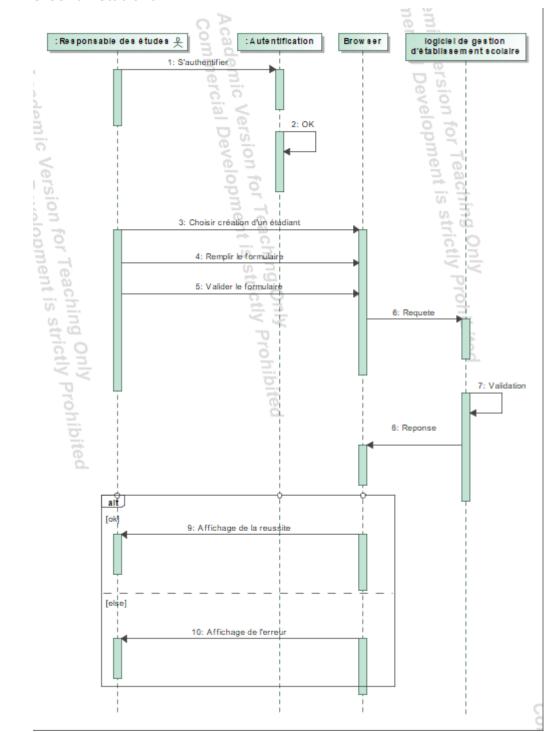


Séquence

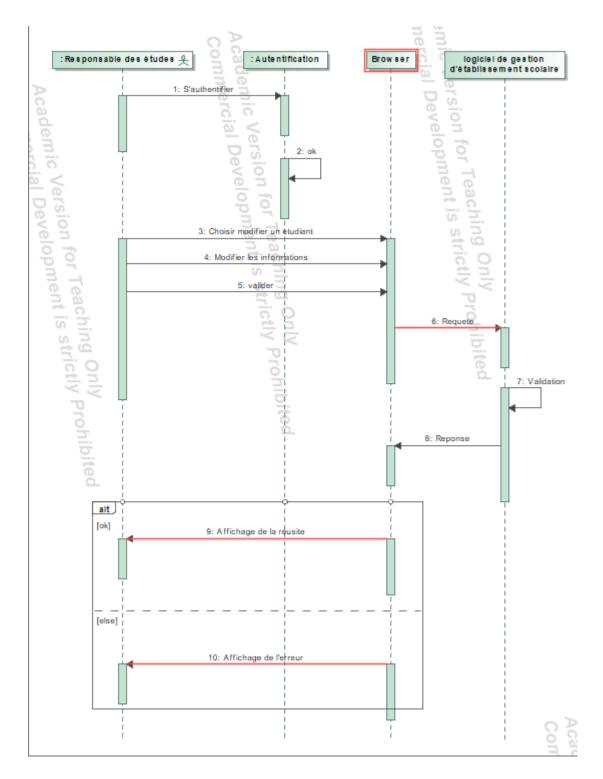
S'authentifier



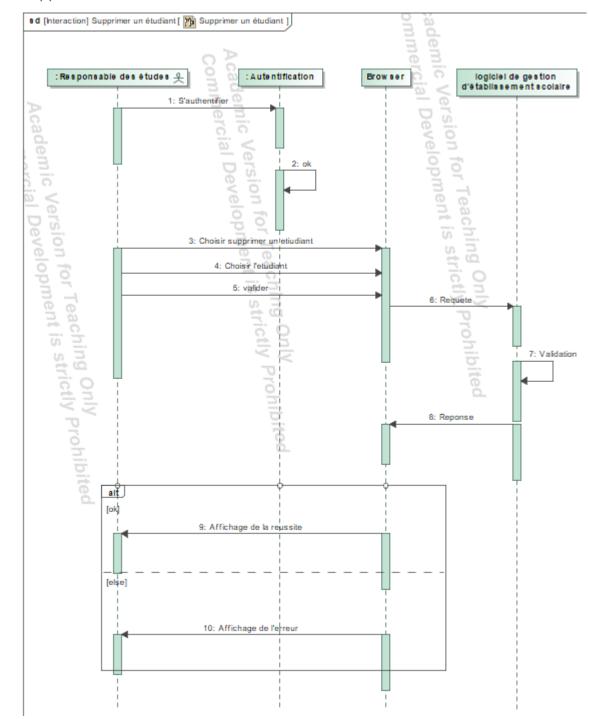
Créer un étudiant



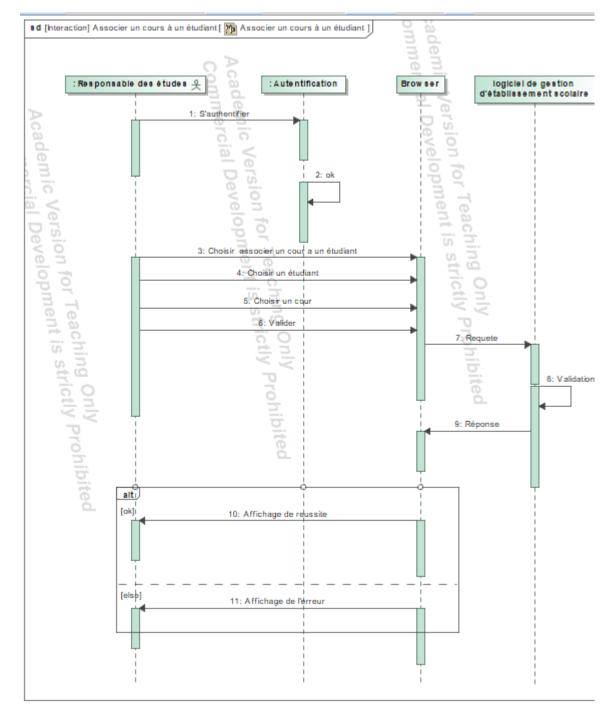
Modifier un étudiant



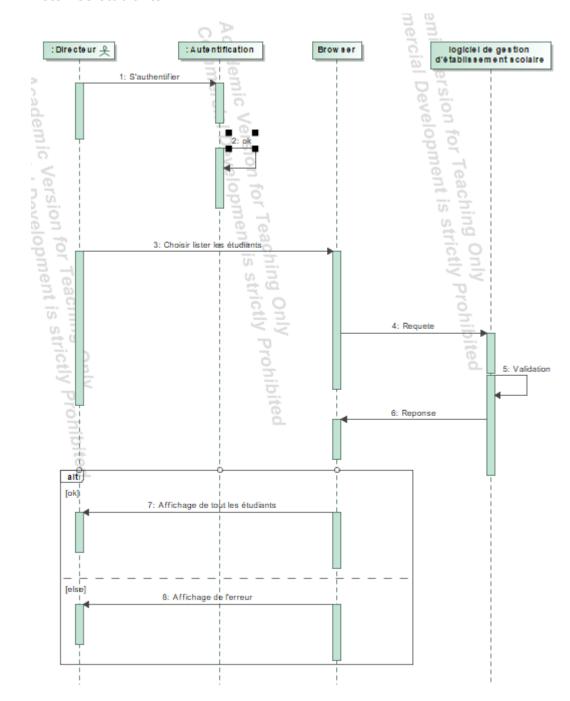
Supprimer un étudiant



Associer un cours à un étudiant



Lister les étudiants



Développement

Technologies utilisés

Back

Pour le back de l'application j'ai utilisé Spring Boot avec jacoco pour le code coverage et Junit5 pour les tests

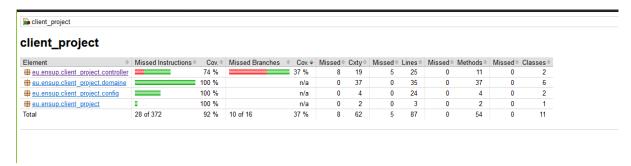
Front

Pour le Front j'ai utiliser le HTML5, CSS, BootStrap

Ma base de données avec des données



Résultat des tests



dans le repo github dans le dossier testCoverage il y a le rapport jacoco

Devops

Jenkins

NON TRAITÉ

Docker

Le dockerFile

```
FROM openjdk:15-jdk-alpine
LABEL MAINTENER="Flavien ANNAIX"
RUN apk update && \
    apk upgrade && \
    apk add git &&\
    apk add maven &&\
    apk add bash
RUN git clone https://github.com/Flav1-ann/course /course
WORKDIR /course
RUN mvn clean package -DskipTests=true
RUN cp target/*.jar app.jar
EXPOSE 80
```

Docker Compose

```
m.tfvars 🗵 📙 flav 1-ann-course .2022-03-16.private-key.pem 🗵 📙 docker-compose.yml 🗵
 version: '3.4'
services:
   server:
     image: flavlann/course
     restart: always
     depends on:
       - db
     network mode: host
   db:
     image: mysql
     command: --default-authentication-plugin=mysql native pass
     restart: always
     cap add:
       - SYS NICE
     environment:
       - MYSQL USER=${MYSQL USER}
       - MYSQL_PASSWORD=${MYSQL_PASSWORD}
       - MYSQL DATABASE=${MYSQL DATABASE}
       - MYSQL_ALLOW_EMPTY_PASSWORD=no
     ports:
       - 3306:3306
```

Ansible

playbook.yml

service:

```
- name: playbook
  hosts: webserver
vars files:
   private_settings.yml
environment:
    MYSQL USER: 'spring'
    MYSQL_PASSWORD: '{{ MYSQL_PASSWORD }}'
    MYSQL_DATABASE: 'course'
  pre tasks:
    - name: Install aptitude using apt
      apt: name=aptitude update_cache=yes force_apt_get=yes
      become: yes

    name: Install required system packages

      apt: name={{ item }} update_cache=yes
      become: yes
      loop:
            "apt-transport-https",
            "ca-certificates",
            "curl",
            "software-properties-common",
            "python3-pip",
            "python-apt",
            "virtualenv",
            "python-setuptools",
            "net-tools",
            "apache2"
    - name: Enable apache2
```

```
3
    - name: Add Docker Repository
      become: yes
=
      apt repository:
        repo: deb https://download.docker.com/linux/ubuntu bionic stable
        state: present
Ξ
    - name: Update apt and install docker-ce and docker-compose
      become: yes
      apt: name={{ item }} update cache=yes
      loop: [ "docker-ce", "docker-compose" ]
=
    - name: Install Python Docker Module
=
        name: ["docker", "docker-compose==1.25.0"]
3
    - name: Copy to remote
=
      copy:
        src: ./docker usr config.sh
        dest: '{{ WORKING DIR }}'
        mode: u=rxw,g=rw,o=r
3
    - name: Add user to docker group
      become: true
3
      shell:
        cmd: ./docker usr config.sh &
        chdir: '{{ WORKING DIR }}'
7
  tasks:
=
    - name: Copy to remote
3
      copy:
        src: ./docker-compose.yml
        dest: '{{ WORKING_DIR }}'
    - name: run docker-compose
      become: true
Ξ
      community.docker.docker compose:
       project src: '{{ WORKING DIR }}'
```

Terraform

Voici le main mais tous les fichiers sont ici https://github.com/Flav1-ann/course_deploy/tree/master/app et https://github.com/Flav1-ann/course_deploy/tree/master/Modules

```
module "ec2" {
      source
                        = "../Modules/EC2"
      author_name
                        = var.author_name
     instance_type
                        = var.instance_type
     private_key_path = var.private_key_path
      availability_zone = var.ec2_avail_zone
     sg_name
                        = module.sg.out-sg-name
     public_ip = module.eip.out_eip_ip
      main_directory = var.main_dir
12 module "sg" {
     source = "../Modules/SG"
      tag_name = var.author_name
   module "eip" {
     source = "../Modules/EIP"
      author_name = var.author_name
22 resource "aws_eip_association" "eip_association" {
      allocation_id = module.eip.out_eip_id
      instance_id = module.ec2.out-ec2-id
```

Résultat sur le cloud AWS

Liens

Docker image

https://hub.docker.com/repository/docker/flav1ann/course

Git hub

projet

https://github.com/Flav1-ann/course

Déploiement

https://github.com/Flav1-ann/course_deploy

AWS

http://3.220.51.2:8080/course/login