

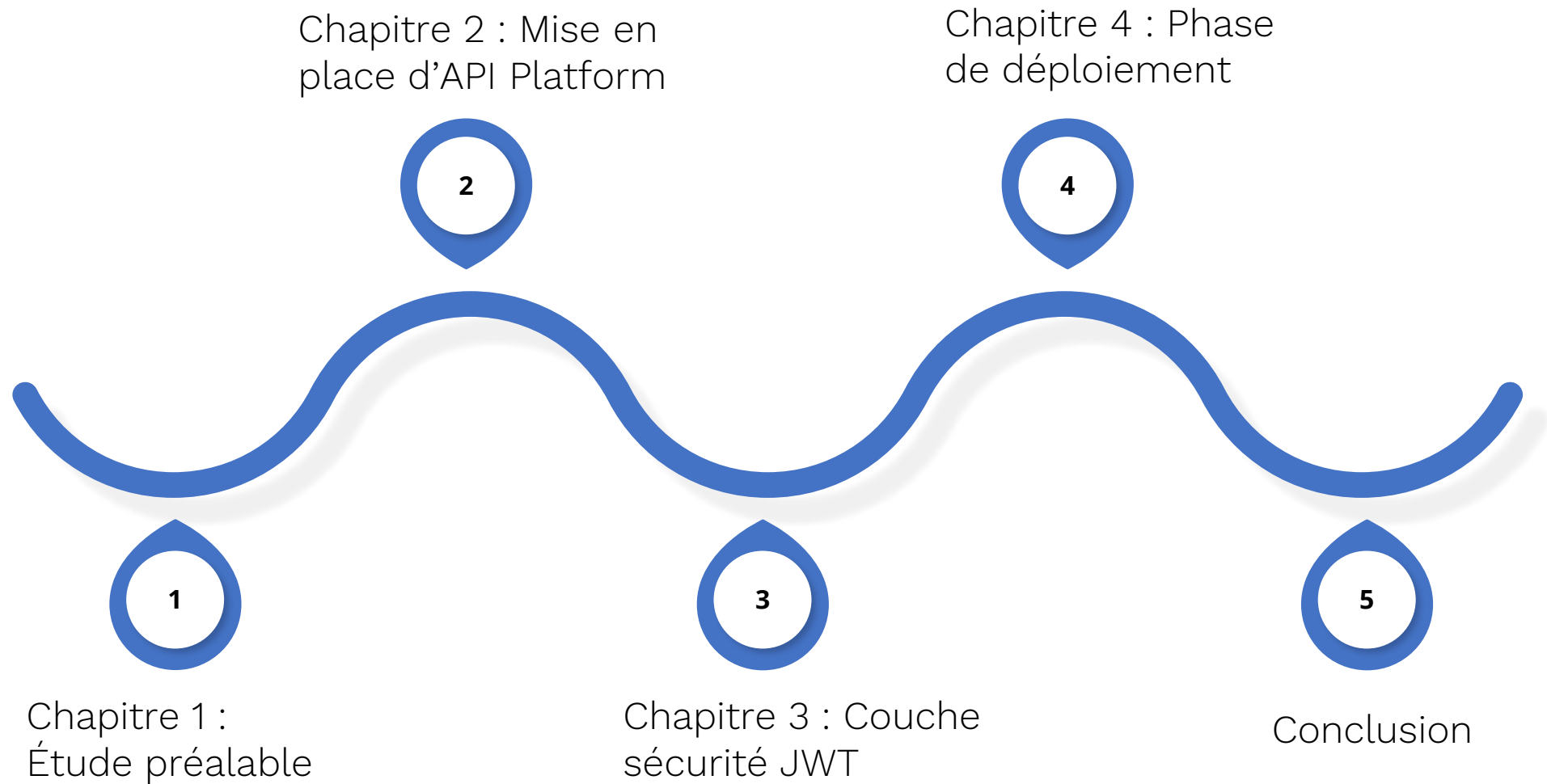


Présentation API

Période de stage : 08/04 au 14/06

Mise en place d'une stratégie API

Sommaire

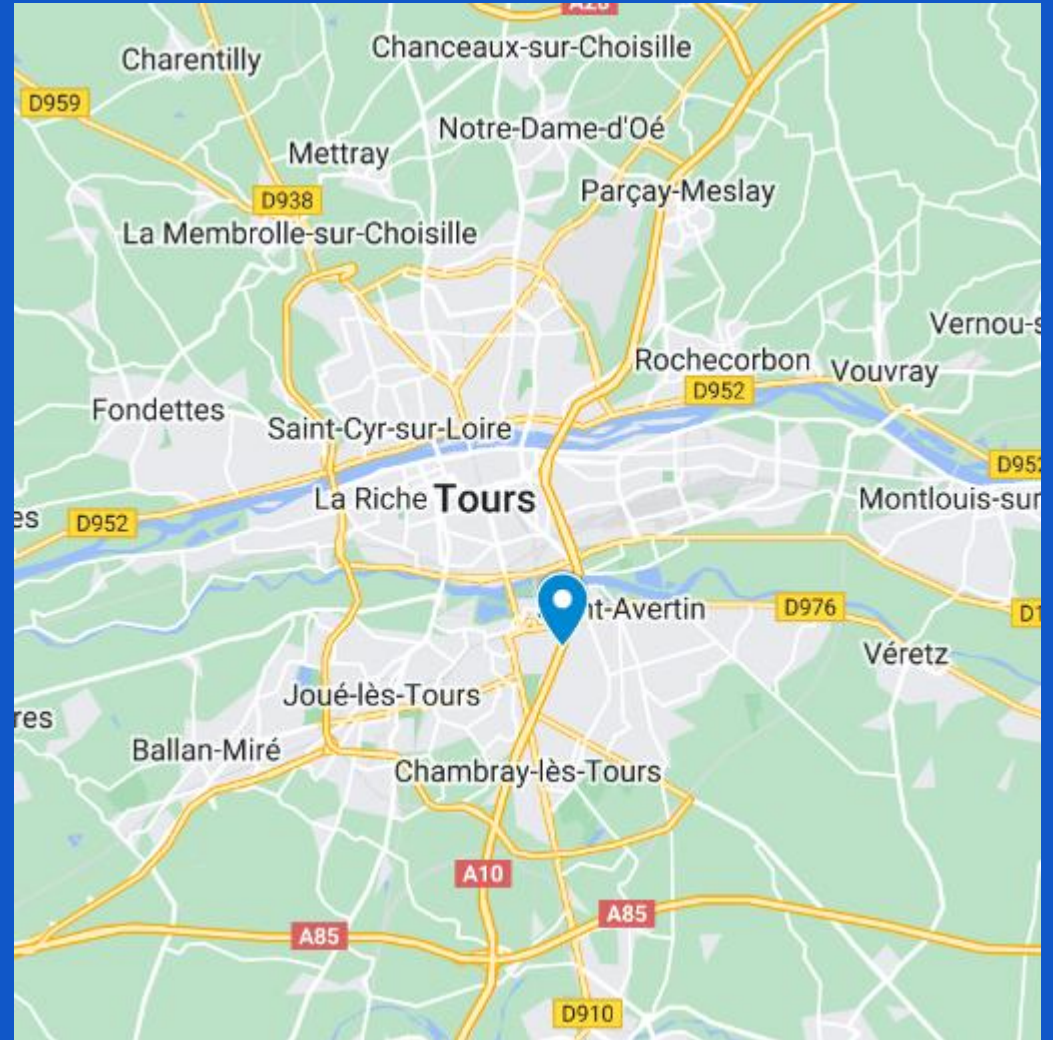


1

Étude préalable

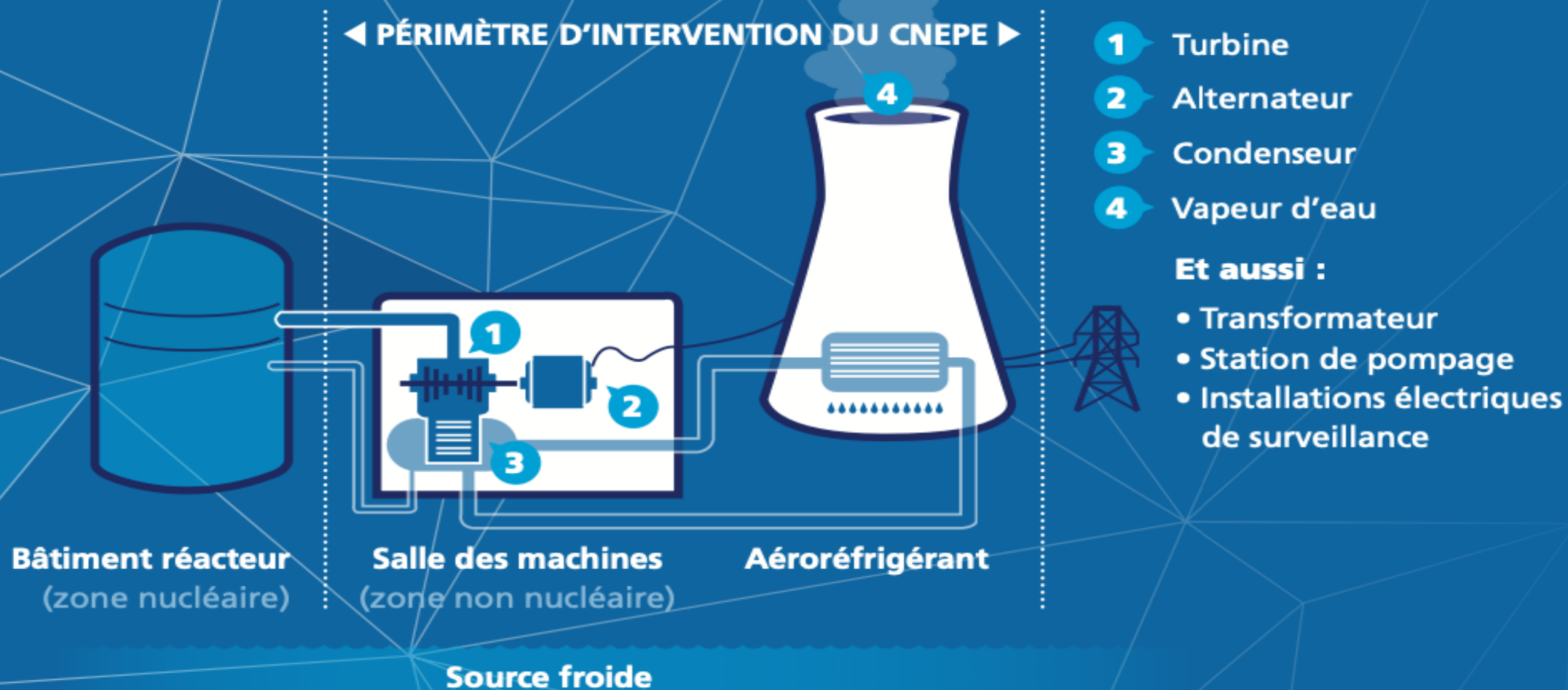
CNEPE

Centre National
d'Equipements de
Production d'Electricité





PÉRIMÈTRE D'INTERVENTION DU CNEPE



Besoins fonctionnels

Côté Utilisateur

- Visualisation des données
- Interface simple d'utilisation
- Requêtes GraphQL (GET)

Côté Administrateur

- CRUD
- Interface simple d'utilisation
- Requêtes GraphQL

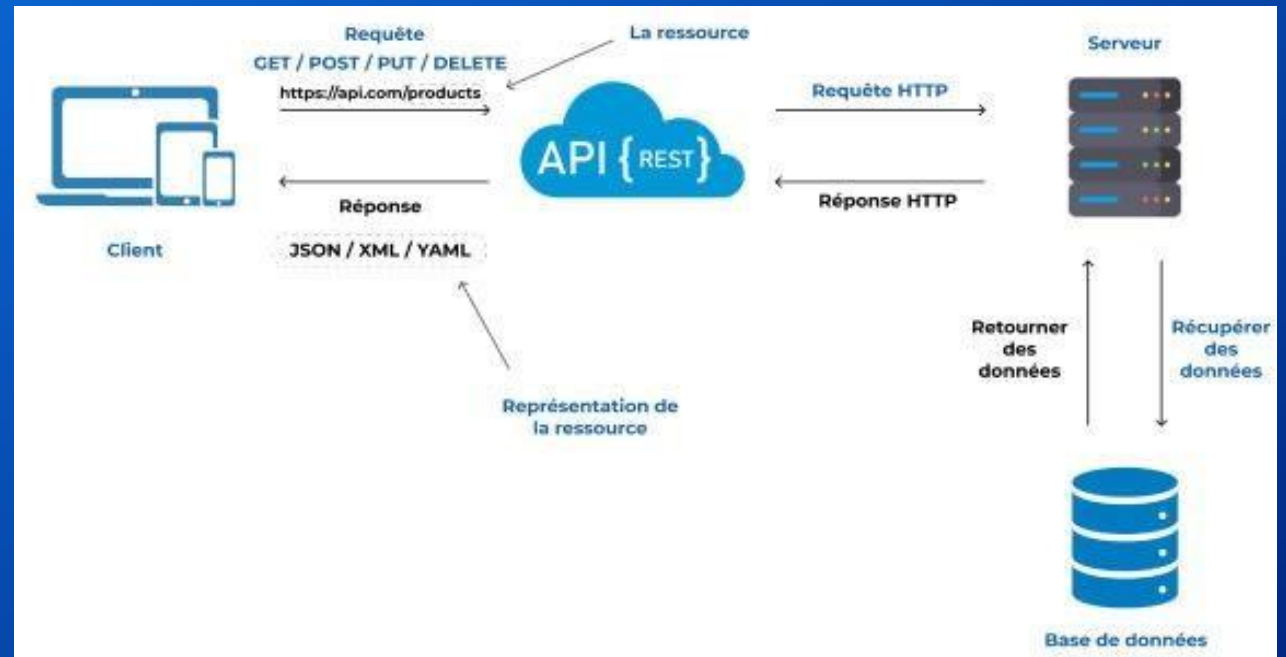
Besoins non fonctionnels



Architecture système (MVC)

4 actions primitives :

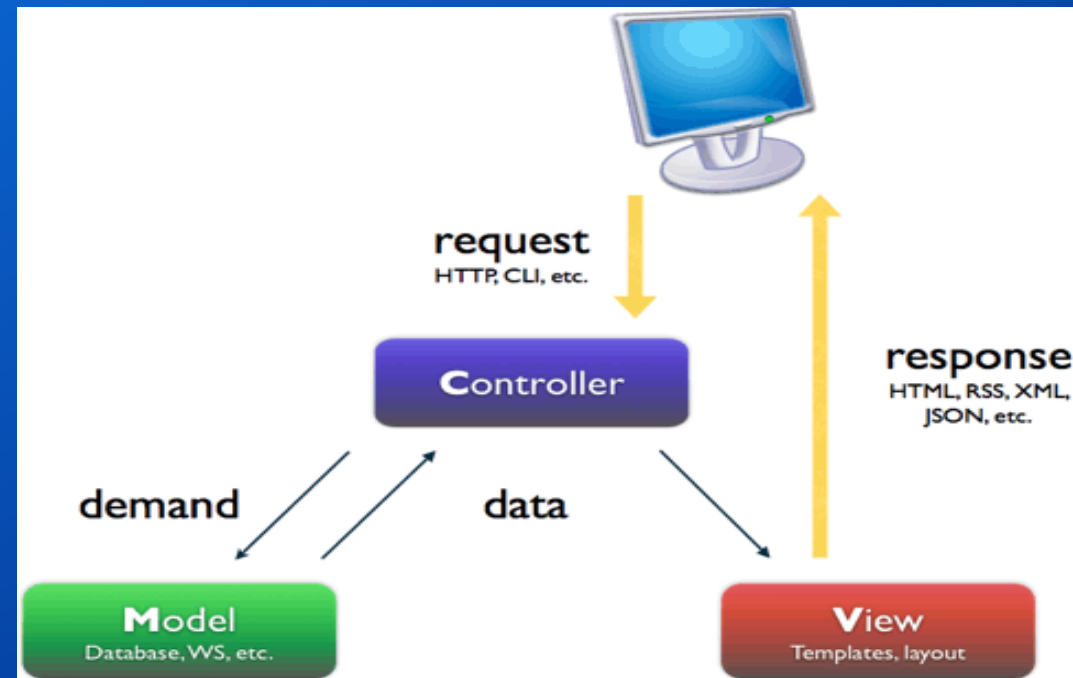
- ❖ GET
- ❖ POST
- ❖ PUT
- ❖ DELETE



Architecture MVC

3 catégories :

- ❖ Modèle
- ❖ Vue
- ❖ Contrôleur



Principales technologies utilisées

IDE : PHP Storm
(JetBrains)



Interactivité

- GitLab
- Teams

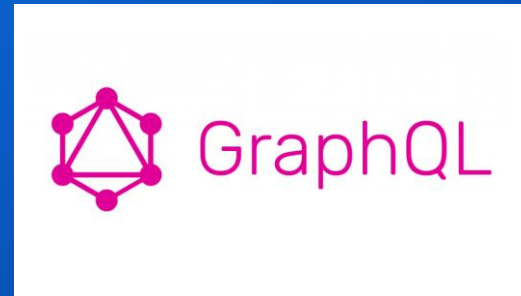
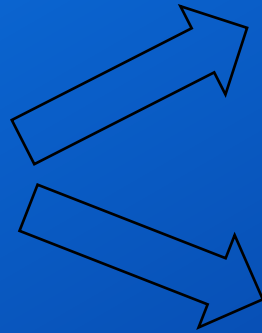
Langage de développement

- PHP
- Twig
- JavaScript

2

Mise en place d'API Platform

API Platform



API Platform

The screenshot displays the API Platform web interface in a browser. The address bar shows the URL `127.0.0.1:36051/api`. The interface has a teal header with the "API PLATFORM" logo and version "0.0.0 OAS3". Below the header, there's a "Servers" dropdown menu and an "Authorize" button. The main content area lists two API resources: "Reservation" and "Settings". Each resource has a list of endpoints with their HTTP methods, URLs, and descriptions. The "Reservation" resource has endpoints for GET, POST, GET, PUT, and DELETE. The "Settings" resource also has endpoints for GET, POST, GET, PUT, and DELETE. The bottom status bar shows various system metrics like CPU usage, memory, and network activity.

Method	Endpoint	Description	Actions
GET	<code>/api/carbooking/reservations</code>	Retrieves the collection of Reservation resources.	Expand, Lock
POST	<code>/api/carbooking/reservations</code>	Creates a Reservation resource.	Expand, Lock
GET	<code>/api/carbooking/reservations/{id}</code>	Retrieves a Reservation resource.	Expand, Lock
PUT	<code>/api/carbooking/reservations/{id}</code>	Replaces the Reservation resource.	Expand, Lock
DELETE	<code>/api/carbooking/reservations/{id}</code>	Removes the Reservation resource.	Expand, Lock

Method	Endpoint	Description	Actions
GET	<code>/api/carbooking/settings</code>	Retrieves the collection of Settings resources.	Expand, Lock
POST	<code>/api/carbooking/settings</code>	Creates a Settings resource.	Expand, Lock
GET	<code>/api/carbooking/settings/{id}</code>	Retrieves a Settings resource.	Expand, Lock
PUT	<code>/api/carbooking/settings/{id}</code>	Replaces the Settings resource.	Expand, Lock
DELETE	<code>/api/carbooking/settings/{id}</code>	Removes the Settings resource.	Expand, Lock

GraphQL

```
31
32 ▾ mutation {
33   createCategory(input: {
34     title: "Nouvelle catégorie",
35     htmlColor: "#FFFFFF"
36   }) {
37     category {
38       id
39       title
40       htmlColor
41     }
42   }
43 }
44
```



```
{
  "data": {
    "createCategory": {
      "category": {
        "id": "/api/cartosi/categories/38",
        "title": "Nouvelle catégorie",
        "htmlColor": "#FFFFFF"
      }
    }
  }
}
```


3

Couche sécurité JWT

Aspect Sécurité des API :



■ Création d'un Api User + JWT

ApiUser

- id

- username

- hashPassword

- createdAt

- createdBy

- updatedAt


- updatedBy

- expireAt (3 mois)

Dashboard

NNI : <monNNI>

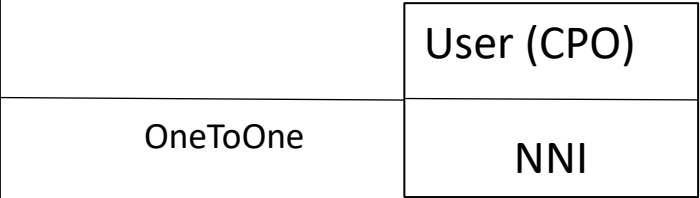
Pass : <motdepasse>

 Générer

Enregistrer

User

<input type="checkbox"/>	ID	Roles	Username	Password
<input type="checkbox"/>	46	ROLE_USER	API_USER_TEST	\$2y\$13\$MWk1pywKNrekIdgib1ycwuSvo9bz4T09i5ycyUaw0S6EJyKIMP3ZW



Utilisation des API

 Scénario Utilisateur

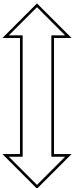
 - Vérification BDD
- Requête POST

Interface Connexion API

NNI : <monNNI>

Pass : <monmotdepasse>

Valider



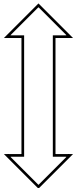
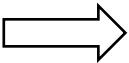
Déblocage des API

Données JSON

BDD

NNI : <monNNI>

Pass : <monmotdepasse>



Accès API Platform

Generate new JWT Token

Example Value | Schema

```
{
  "username": "NNI",
  "password": "Mot de passe"
}
```

Code | Details

401
Undocumented Error: Unauthorized

Response body

```
{
  "code": 401,
  "message": "Identifiants invalides."
}
```

Response body

```
{
  "@context": "/api/v1/contexts/Category",
  "@id": "/api/v1/categories",
  "@type": "hydra:Collection",
  "hydra:member": [
    {
      "@id": "/api/v1/categories/11",
      "@type": "Category",
      "id": 11,
      "title": "omnis",
      "htmlColor": "#aceb4f"
    }
  ],
}
```

Couche sécurité

Administration CPO

Rechercher

bilel

ApiUser [Créer ApiUser](#)

<input type="checkbox"/>	ID	Nom d'utilisateur	Jwt Token	Roles	Email	Expire At
<input type="checkbox"/>	1	bilel	eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiU9.eyJpYXQiOiJ0e3MTc0MjMwMTMslm...	ROLE_ADMIN, ROLE_USER, ROLE_API_USER, ROLE_API_ADMIN	bilel.chebbi@edf.fr	3 sept. 2024

1 résultat

Interface admin : CPO



...

Modifier

Supprimer

Couche sécurité



<input type="checkbox"/>	39	ROLE_USER	IIR951	Grenier	Hortense	GRENIER	Hortense.Grenier@edf.fr	Aucun(e)	75757684	...
<input type="checkbox"/>	40	ROLE_USER	RHZOA7BI	Mace	Monique	MACE	Monique.Mace@edf.fr	Aucun(e)	44600155	...
<input type="checkbox"/>	41	ROLE_USER	P9TPPXQK	Barthelemy	Marine	BARTHELEMY	Marine.Barthelemy@edf.fr	Aucun(e)	63562100	...
<input type="checkbox"/>	42	ROLE_ADMIN, ROLE_USER	ZNJMI1OA	Pichon	Patricia	PICHON	Patricia.Pichon@edf.fr	Aucun(e)	27257207	...
<input type="checkbox"/>	43	ROLE_ADMIN, ROLE_USER	W5BJ5W	Lombard	Louise	LOMBARD	Louise.Lombard@edf.fr	Aucun(e)	89245623	...
<input type="checkbox"/>	45	ROLE_USER	TRANSFO_CHART_ADMIN_TEST	Charrier	Christelle	Aucun(e)	Christelle.Charrier@edf.fr	Aucun(e)	Aucun(e)	...
<input type="checkbox"/>	46	ROLE_ADMIN, ROLE_USER	bilel	Aucun(e)	Aucun(e)	Aucun(e)	bilel.chebbi@edf.fr	Aucun(e)	Aucun(e)	...

46 résultats

< Précédent 1 2 3 Suivant

Autorisation API

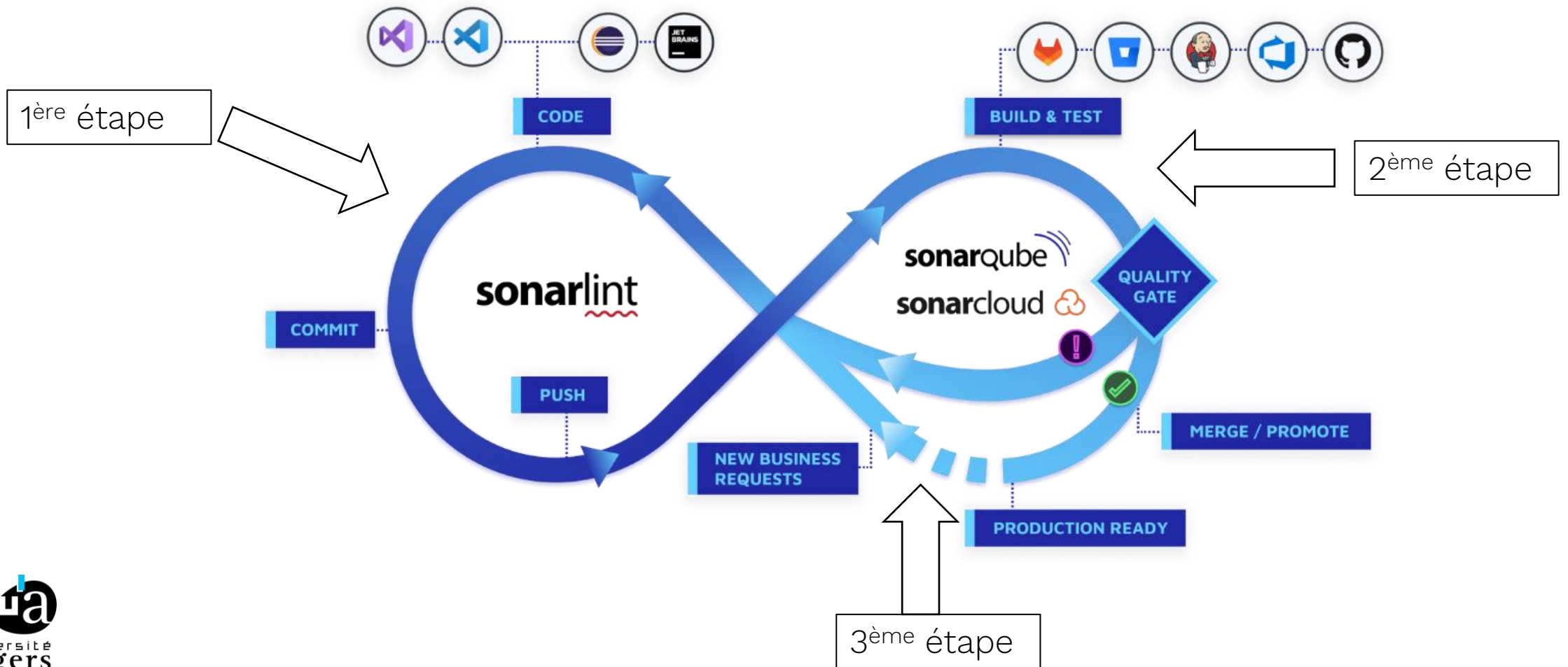
Modifier

Supprimer

4

Phase de déploiement

Phase de déploiement



Merci de votre
écoute

Des questions ?

Bibliographie

- **EDF**
- **API Platform**
- **Hubvisory**
- **Weenesta**