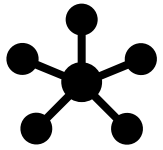# PS7 PRESENTATION POLYVILLE ACTIVE

João Brilhante
Charly Ducrocq
Quentin Larose
Loïc Rizzo

UNIVERSITÉ CÔTE D'AZUR

POLYTECH NICE-SOPHIA

SUMMARY

How do the chosen axes interact?

Which features are available ?

What is the innovative part?

Why is the project technically well done?

[AL-2] EXTENSIBILITY & INTEROPERABILITY

How do the chosen axes interact?

Which features are available?

What is the innovative part?
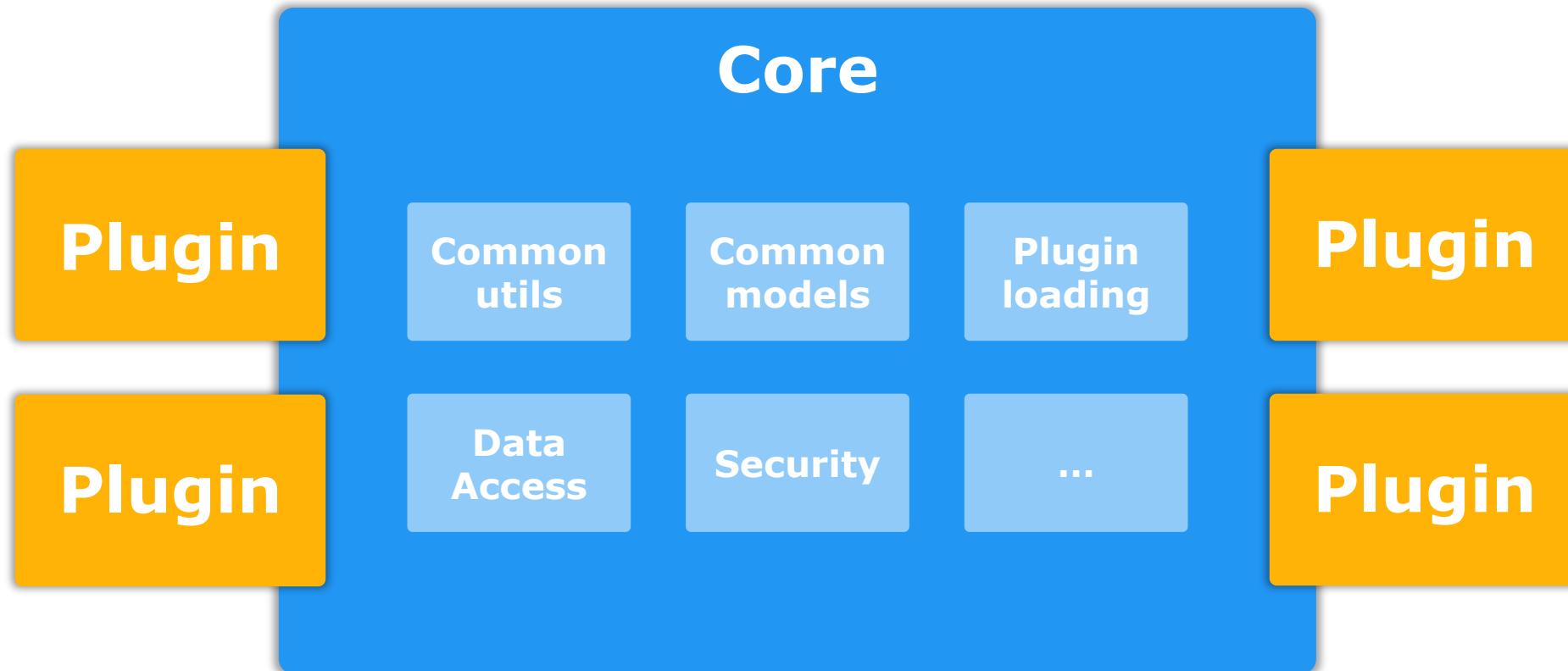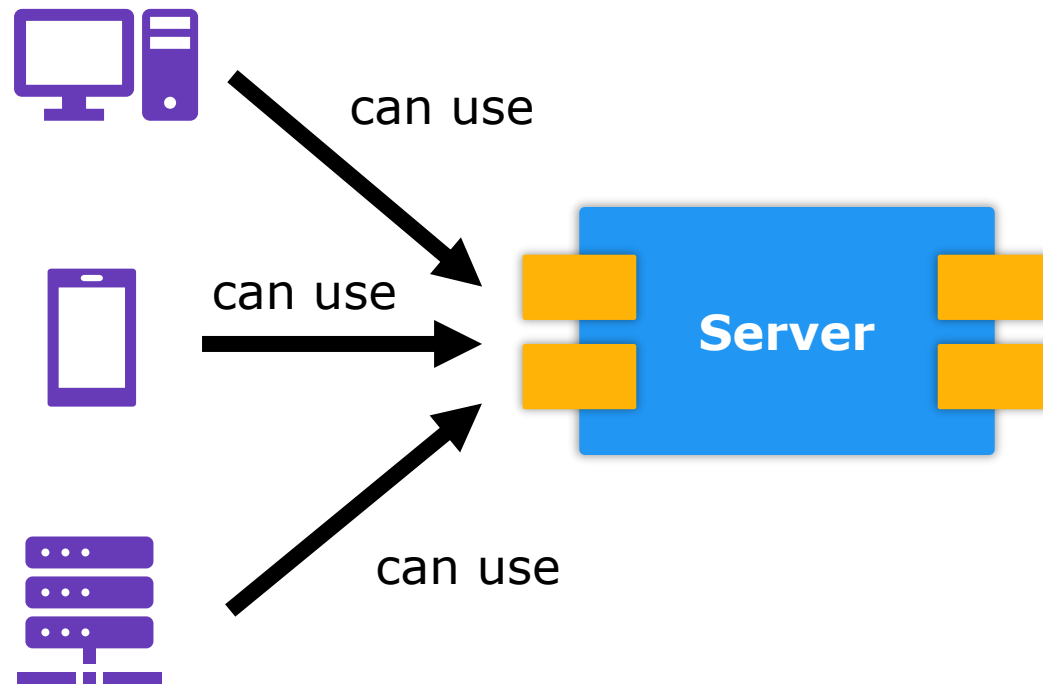
Why is the project technically well done?

[AL-3] SOFTWARE FACTORY & CLONE ARMY

Core

Plugin		Plugin
	Common utils — Common models — Plugin loading	
Plugin	Data Access — Security — ...	Plugin

1. PLUGINS CAN PRODUCE AN API

Plugin → can define →

pet Everything about your Pets

Find out more: http://swagger.io ⌄
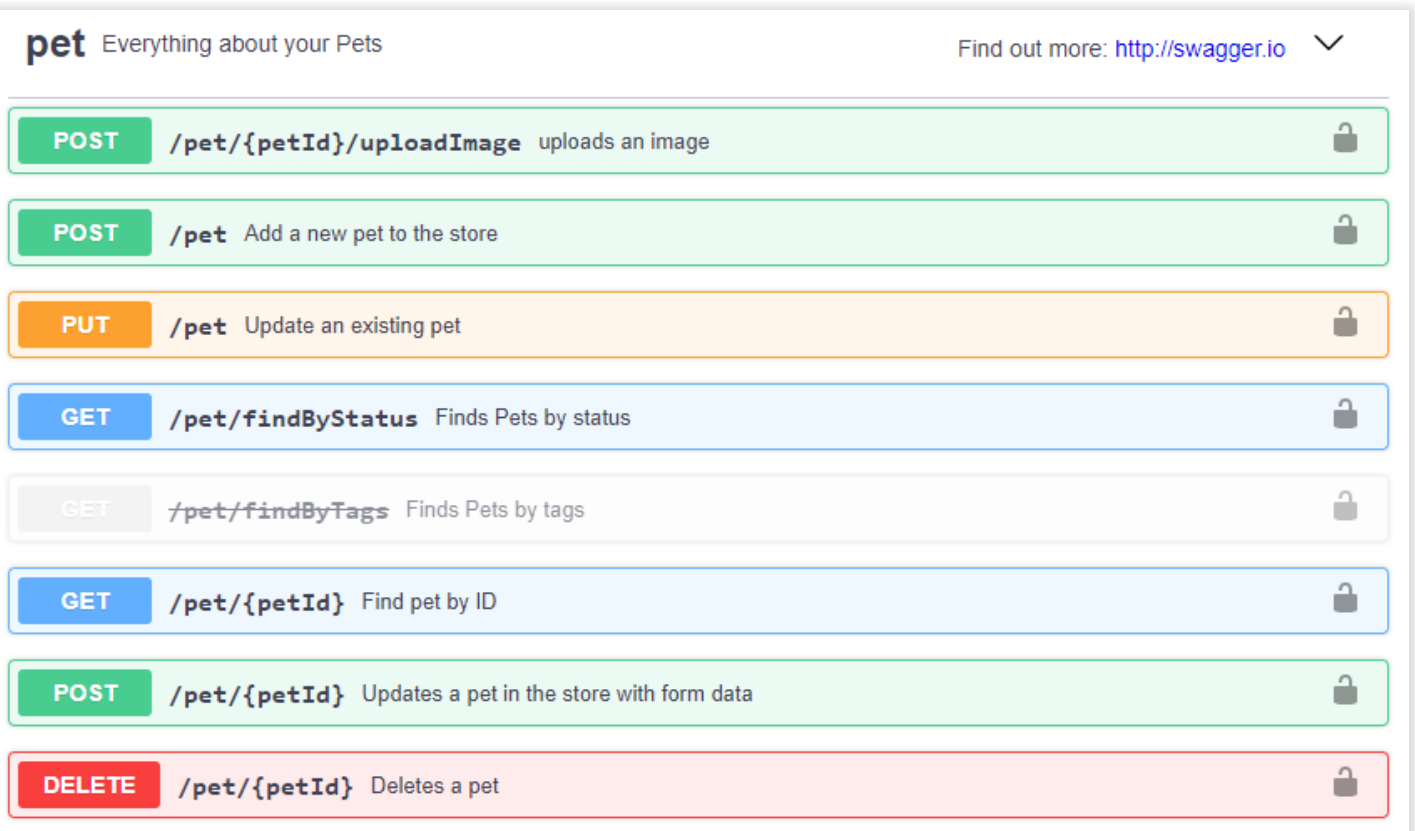
POST	/pet/{petId}/uploadImage	uploads an image	🔓
POST	/pet	Add a new pet to the store	🔓
PUT	/pet	Update an existing pet	🔓
GET	/pet/findByStatus	Finds Pets by status	🔓
GET	/pet/findByTags	Finds Pets by tags	🔓
GET	/pet/{petId}	Find pet by ID	🔓
POST	/pet/{petId}	Updates a pet in the store with form data	🔓
DELETE	/pet/{petId}	Deletes a pet	🔓

1. PLUGINS CAN PRODUCE AN API

can use

can use

Server

can use

2. PLUGINS CAN CONSUME AN EXTERNAL API

```
"records": [
  {
    "datasetid": "park-indigo-disponibilite-temps-reel@issy-les-moulineaux",
    "recordid": "25954bf78c2fc64aa504b0956ed14f6efe73cc08",
    "fields": {
      "ville": "Boulogne-Billancourt",
      "c_p_situation": "92100",
      "remplissage": 50.095238095238095,
      "value_free_spots": 262,
      "adresse_situation_2": "Avenue du stade Pierre de Coubertin",
      "value_updated_at": "2021-01-07T22:46:15+00:00",
      "parking_id": "92010200",
      "nombre_de_places_contractuelles": 525,
      "name": "Point du Jour",
      "value_status": "0",
      "geo": [
        48.834732056,
        2.255501986
      ],
      "adresse_situation_1": "Place Abel Gance"
    },
    "geometry": {
      "type": "Point",
      "coordinates": [
        2.255501986,
        48.834732056
      ]
    },
    "record_timestamp": "1970-01-01T00:00:00+00:00"
  },
```
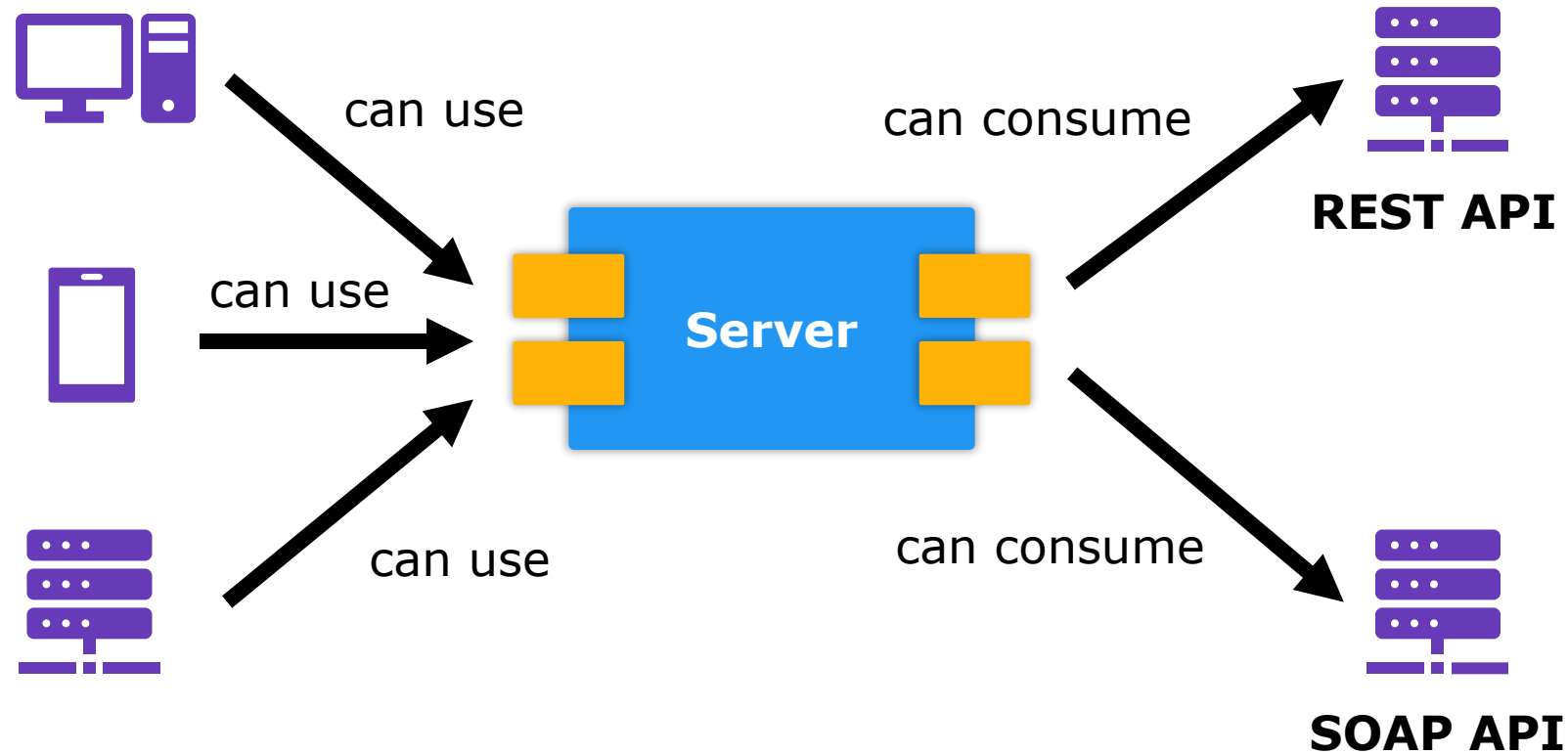
can consume

Plugin

2. PLUGINS CAN CONSUME AN EXTERNAL API

3. PLUGINS CAN DEFINE EXTENSION POINTS

1. DYNAMIC PLUGIN MANAGEMENT

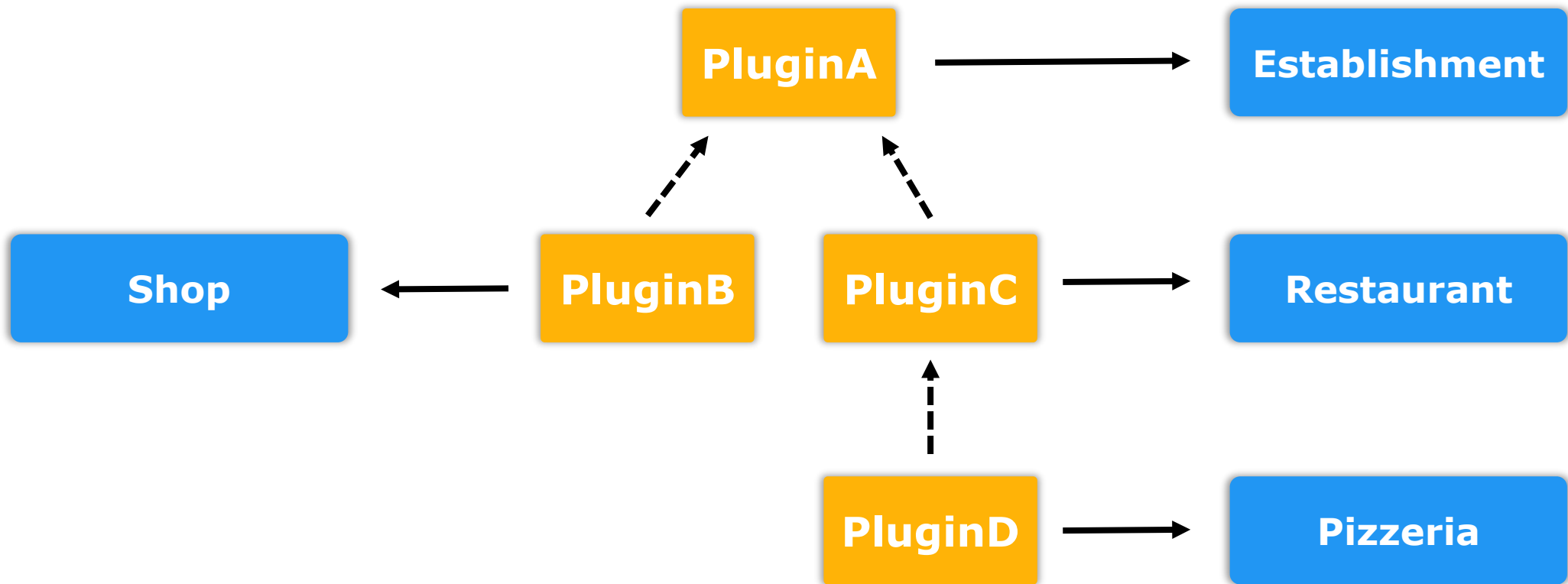| How do the chosen axes interact? | Which features are available? | What is the innovative part? | Why is the project technically well done? |

Charger les nouveaux plugins   **Redémarrer les plugins**

Nom	Version	Auteur	Etat	Actions
parking	0.0.1	AL1	Démarré	■ Arrêter ↻ Redémarrer
parkingInnovation	0.0.1	AL1	Démarré	■ Arrêter ↻ Redémarrer
parkingadapterIndigo	0.0.1	AL1	Démarré	■ Arrêter ↻ Redémarrer
shops	0.0.1	AL1	Arrêté	▶ Démarrer
parkingadapterGP	0.0.1	AL1	Démarré	■ Arrêter ↻ Redémarrer
events	0.0.1	AL1	Démarré	■ Arrêter ↻ Redémarrer
hello	0.0.1	External author	Non chargé	+ Charger

2. SHOP MANAGEMENT

Modifier les informations de votre magasin

Le nom du magasin : PolyFood

La latitude du magasin : 43.123456

La longitude du magasin : 7.123456

Confirmer

Créer votre promotion

Titre de la promotion : Fruits Discount

Condition de la promotion : Only applies on fruits

Forme de la promotion : ⦿ En pourcentage ◯ En brut

Valeur de la promotion : 20

Créer

3. EVENT MANAGEMENT

Créer votre évènement

Titre de l'évènement : AL1 Keynote

Description de l'évènement : Talking about upcoming events an

Début de l'événement : Fri Jan 08 2021 13:30:00 GMT+010

Fin de l'événement : Fri Jan 08 2021 15:10:00 GMT+010

Créer

4. PARKING MANAGEMENT

Modifier les informations de votre parking

Le nom du parking : Town Hall

Le nombre de places : 268

La latitude du magasin : 43.123456

La longitude du magasin : 7.123456

Confirmer

Server

consumes → INDIGO GROUP

consumes → GRAND POITIERS Communauté urbaine

5. CITY MAP

Polyville

SMART PARKING

How do the chosen axes interact?

Which features are available?

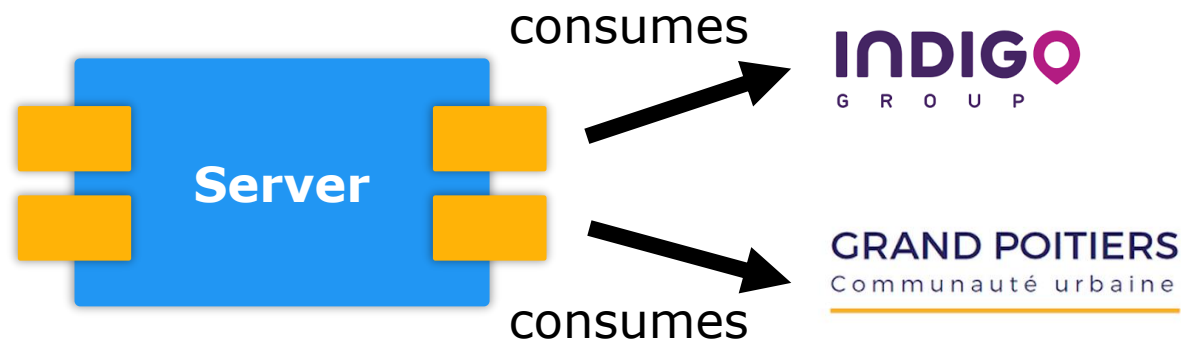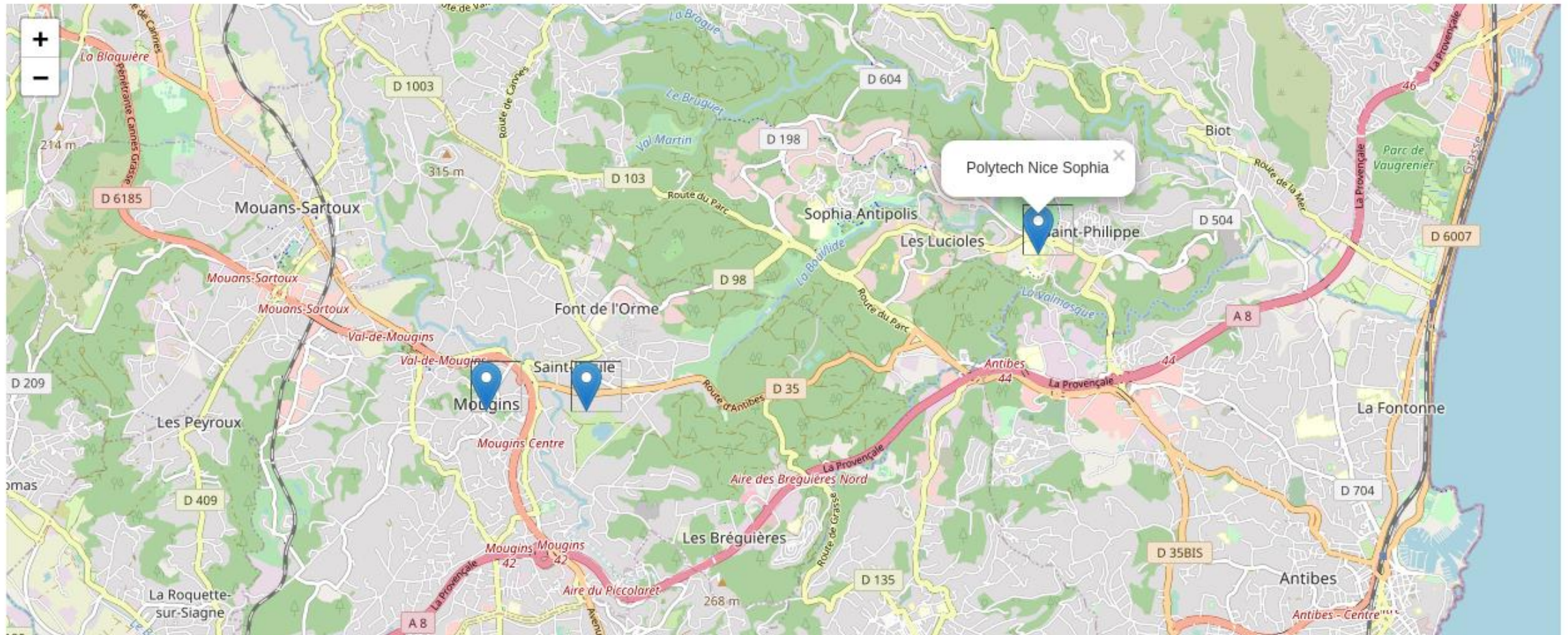What is the innovative part?
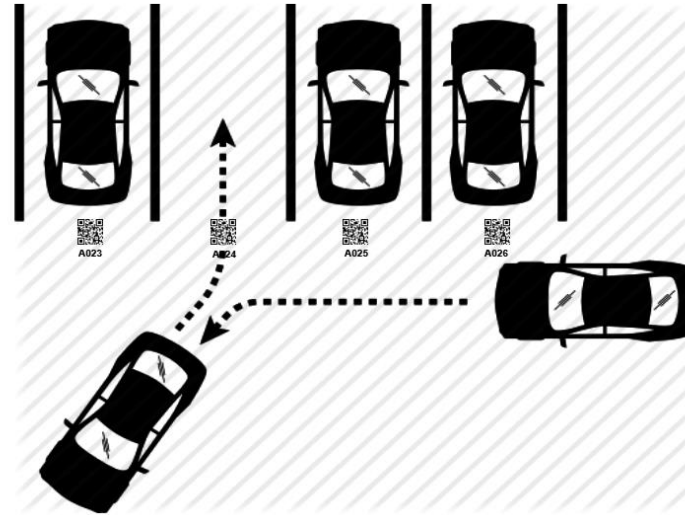
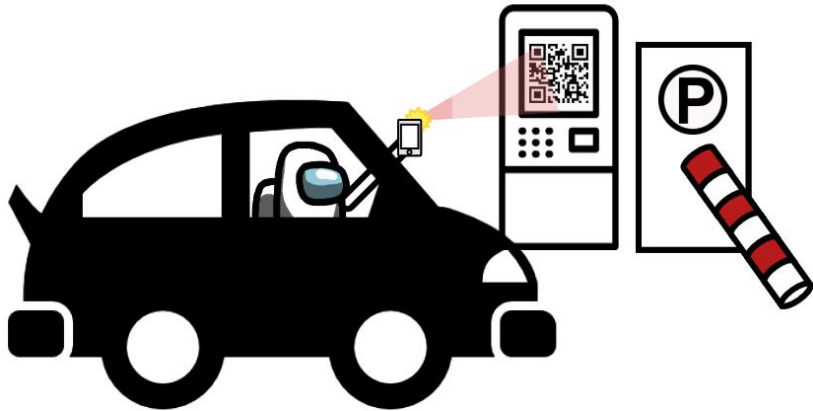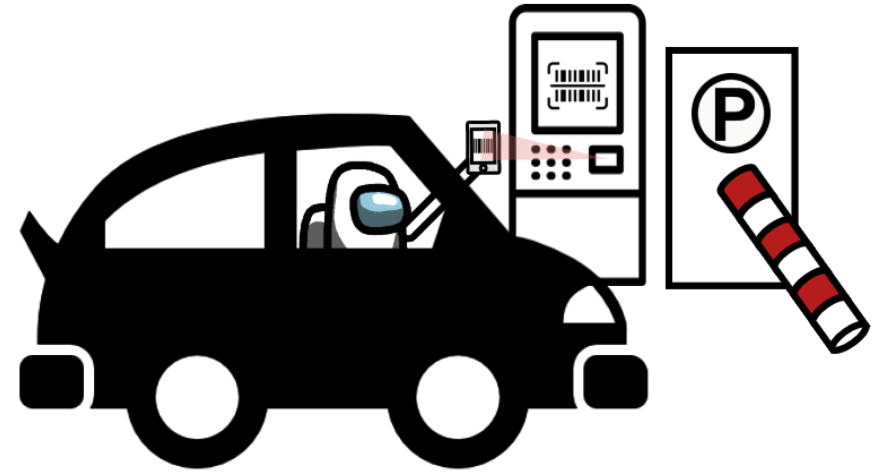Why is the project technically well done?

1. CLOSED PARKING

1. CLOSED PARKING

2. OPEN PARKING

TECHNOLOGY SELECTION

How do the chosen axes interact? > Which features are available? > What is the innovative part? > Why is the project technically well done?
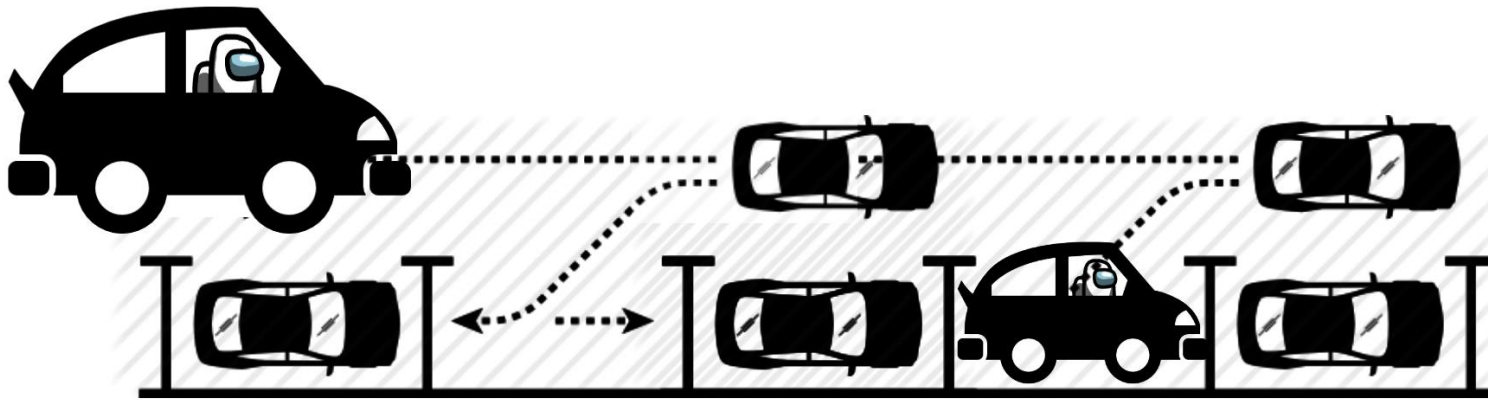
SPRING BOOT

Popular

Mature

Stable

Java-based

Flexible

Spring Ecosystem

spring boot

PF4J

Java-based

Well tested

Still maintained

Spring compatible

Mature

Complete feature set

PF4J

ANGULAR

Component-based

Mature

Testable

Popular

ANGULAR

Angular Ecosystem

PLUGIN DEVELOPMENT

PLUGIN DEVELOPMENT

Plugin

defines →

org.example.PluginClass

Plugin class

spring boot

org.example.PluginApplication

Plugin application

defines →

```
plugin.id=pluginName
plugin.class=org.example.PluginClass
plugin.version=0.0.1
plugin.provider=Author
plugin.dependencies=pluginB@1.0.5, pluginC@>=2.0.0
```

Plugin properties

PLUGIN DEVELOPMENT

PLUGIN DEVELOPMENT

PROJECT TESTS

push

GitHub

GitHub Actions

✅ Run the server.
✅ Wait for the server.
✅ Copy an external plugin.
✅ Run the Postman collection.
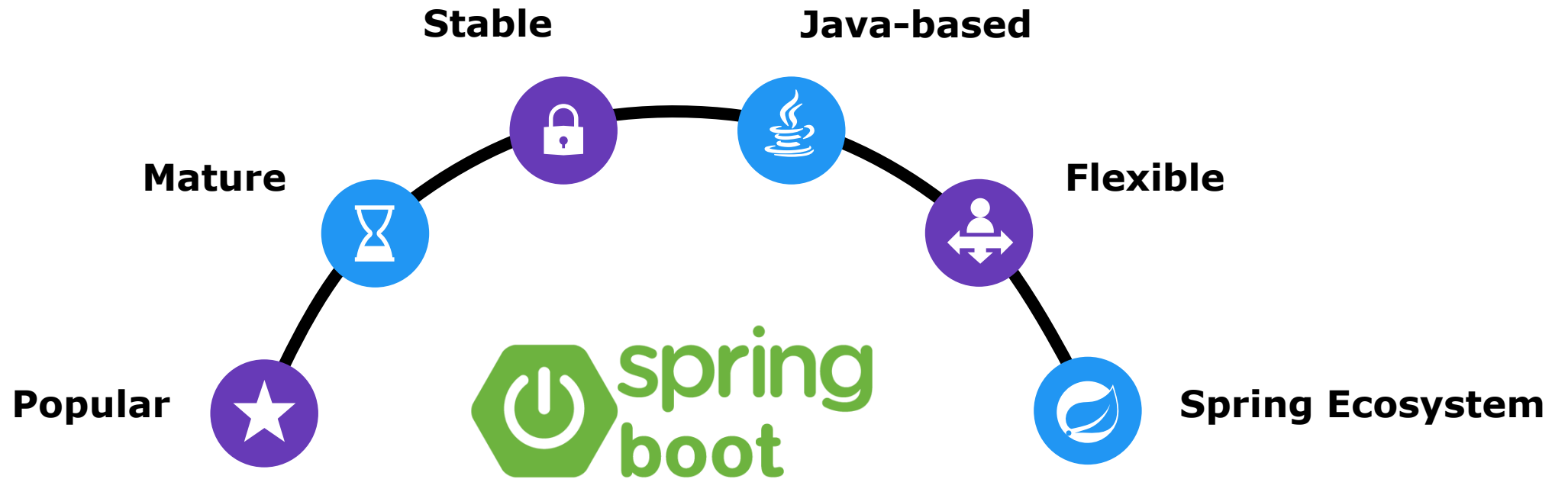
`<remote-server>:443`

spring

docker + PostgreSQL

PROJECT TESTS

How do the chosen axes interact?

Which features are available?

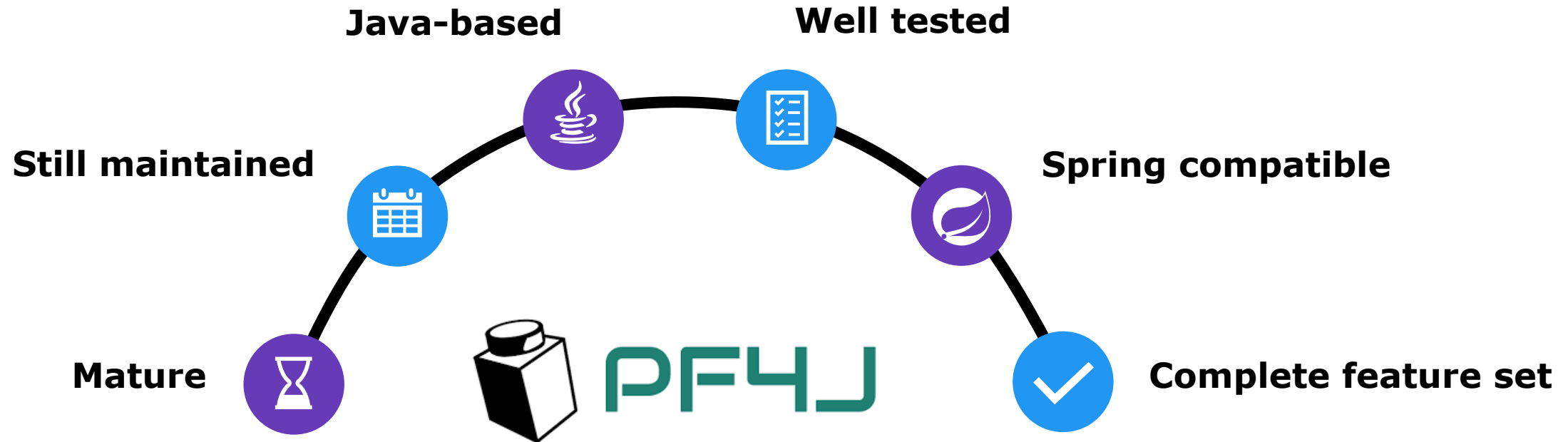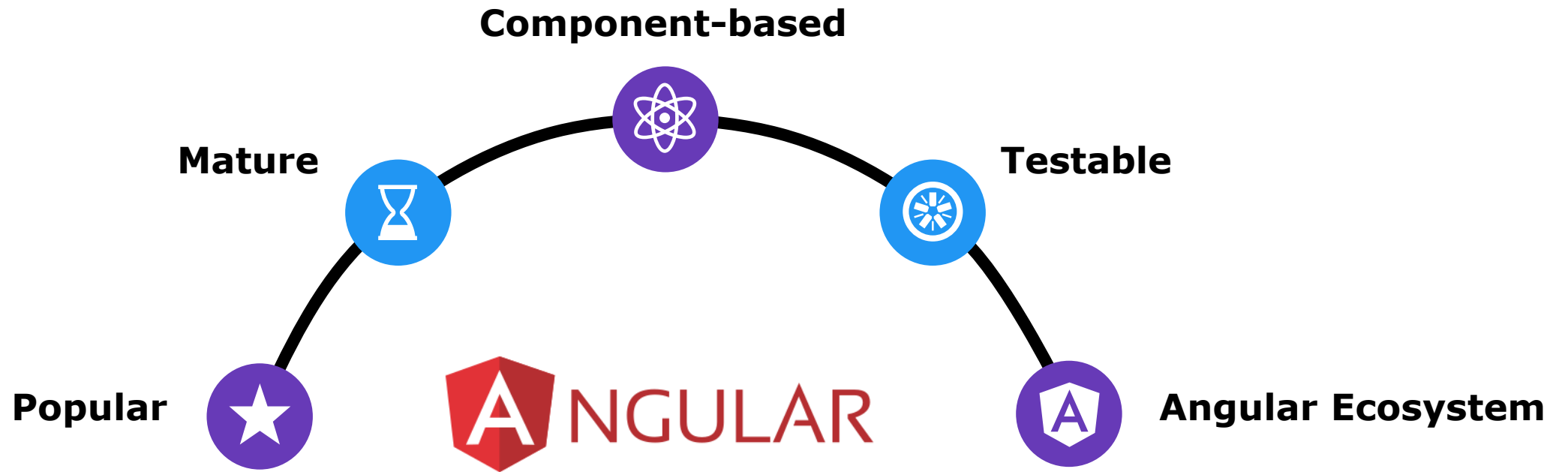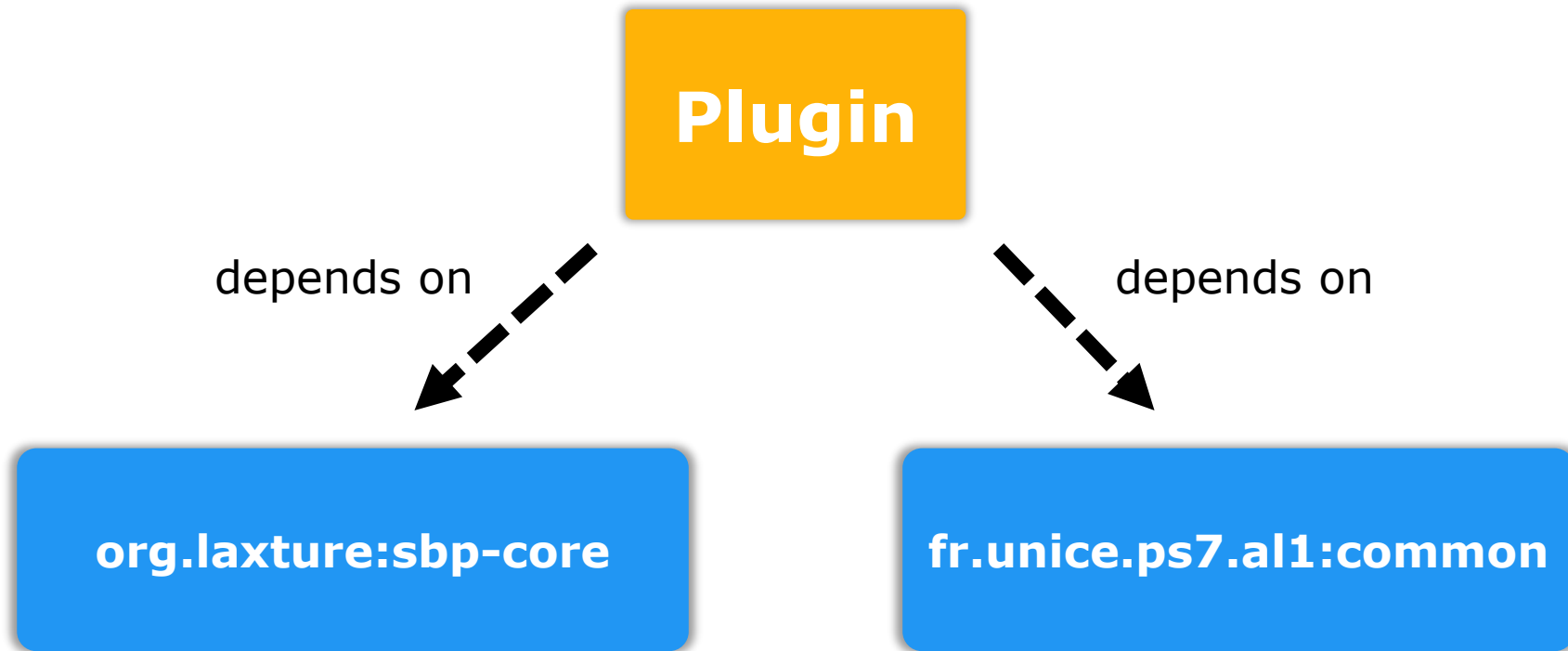What is the innovative part?

Why is the project technically well done?

POSTMAN
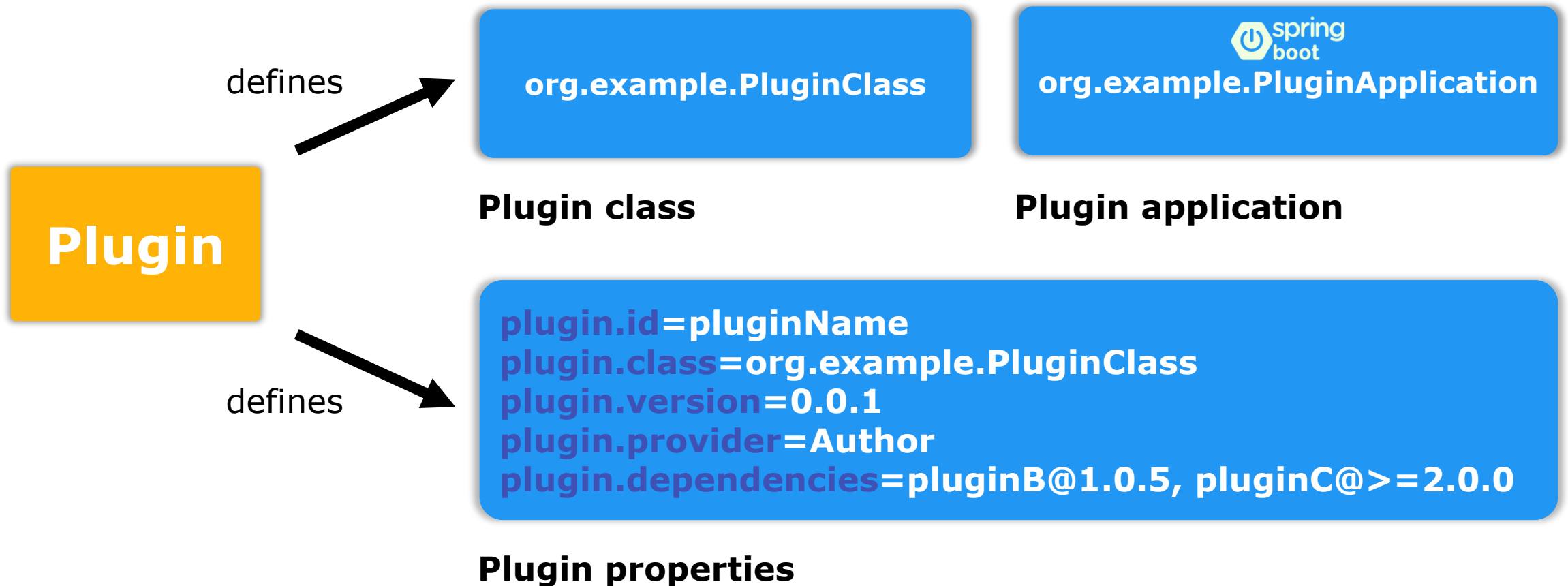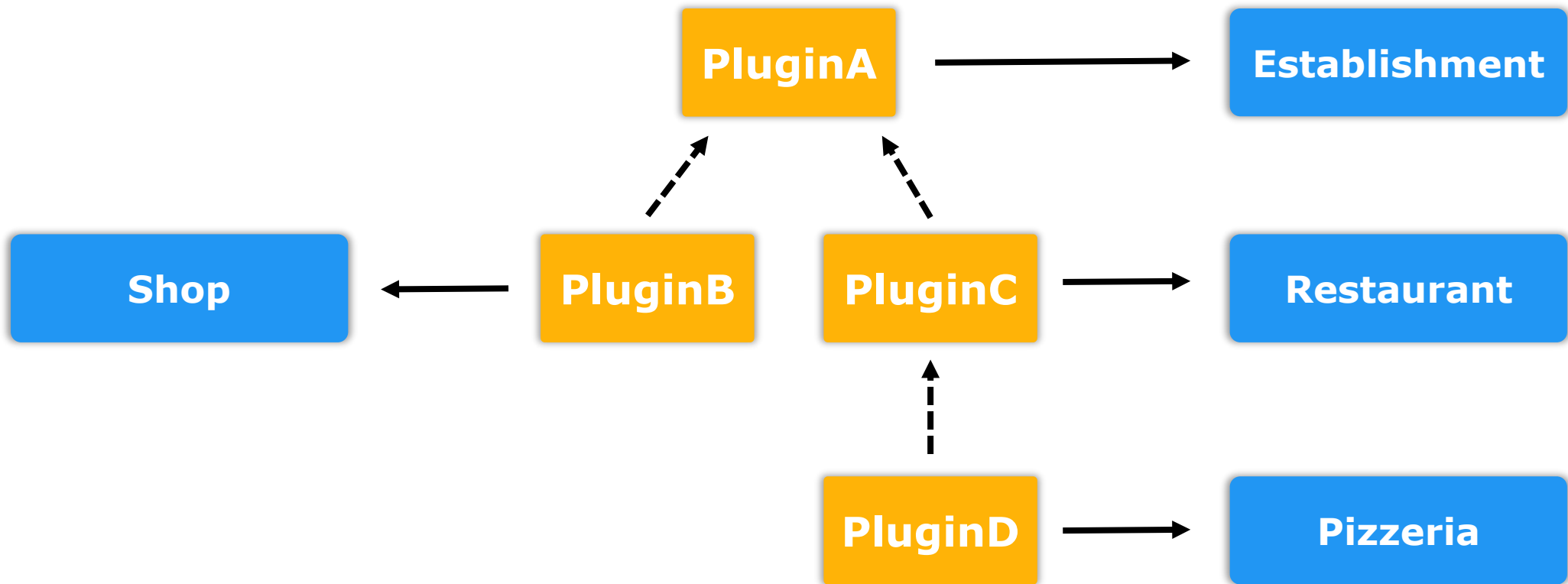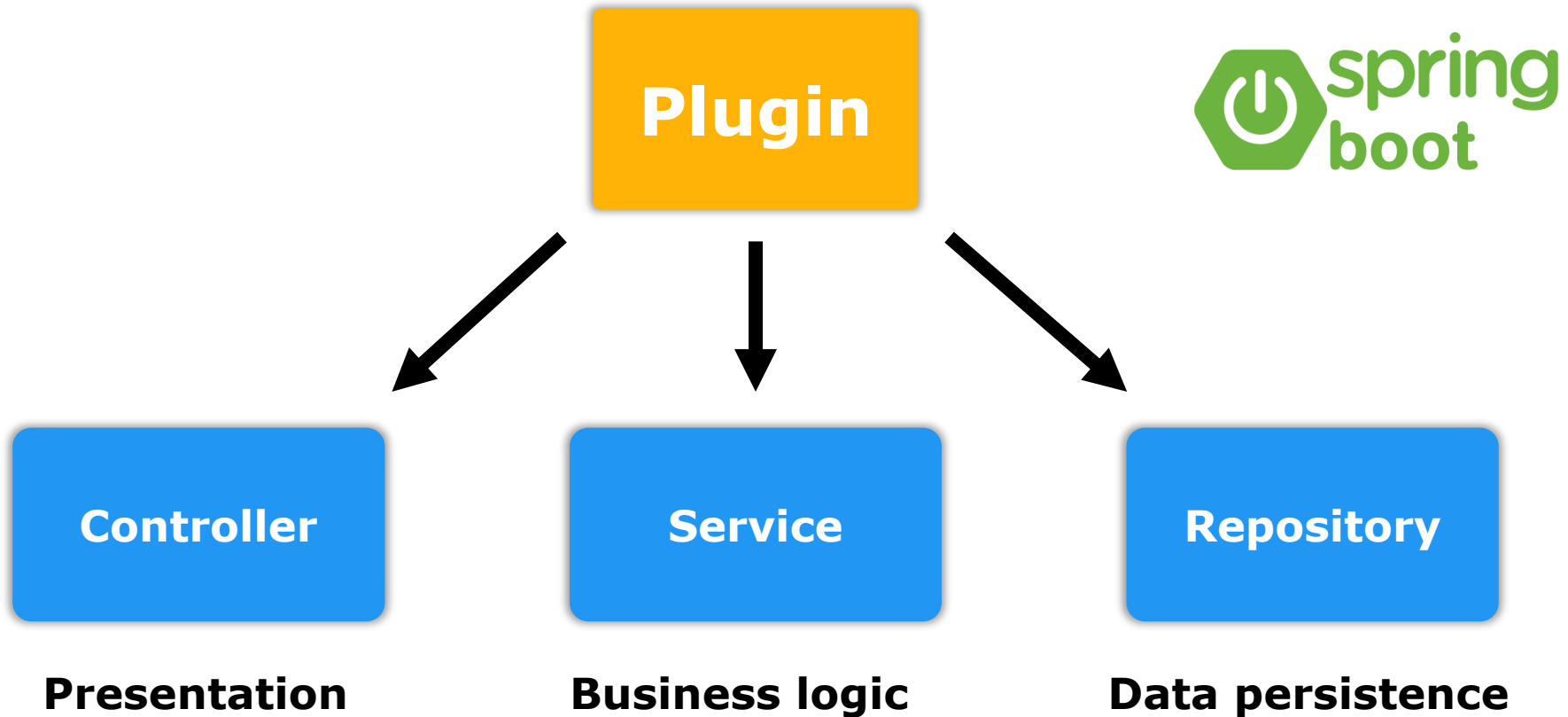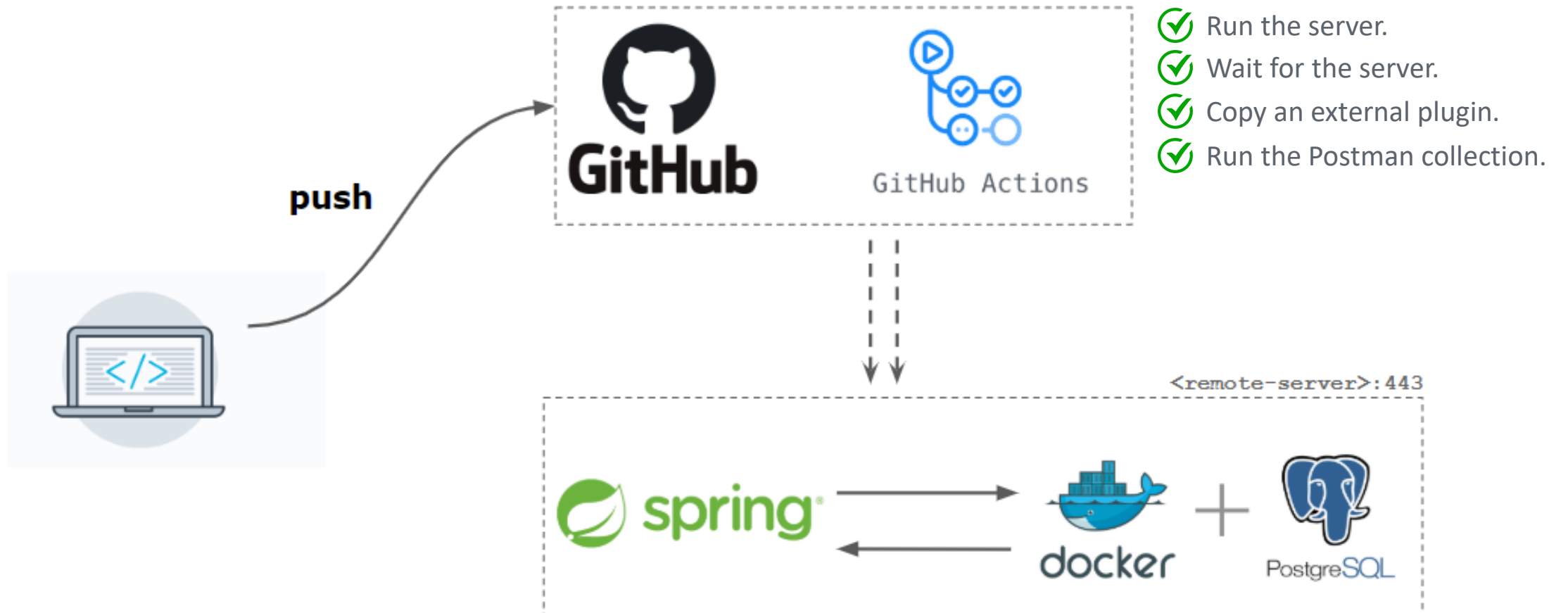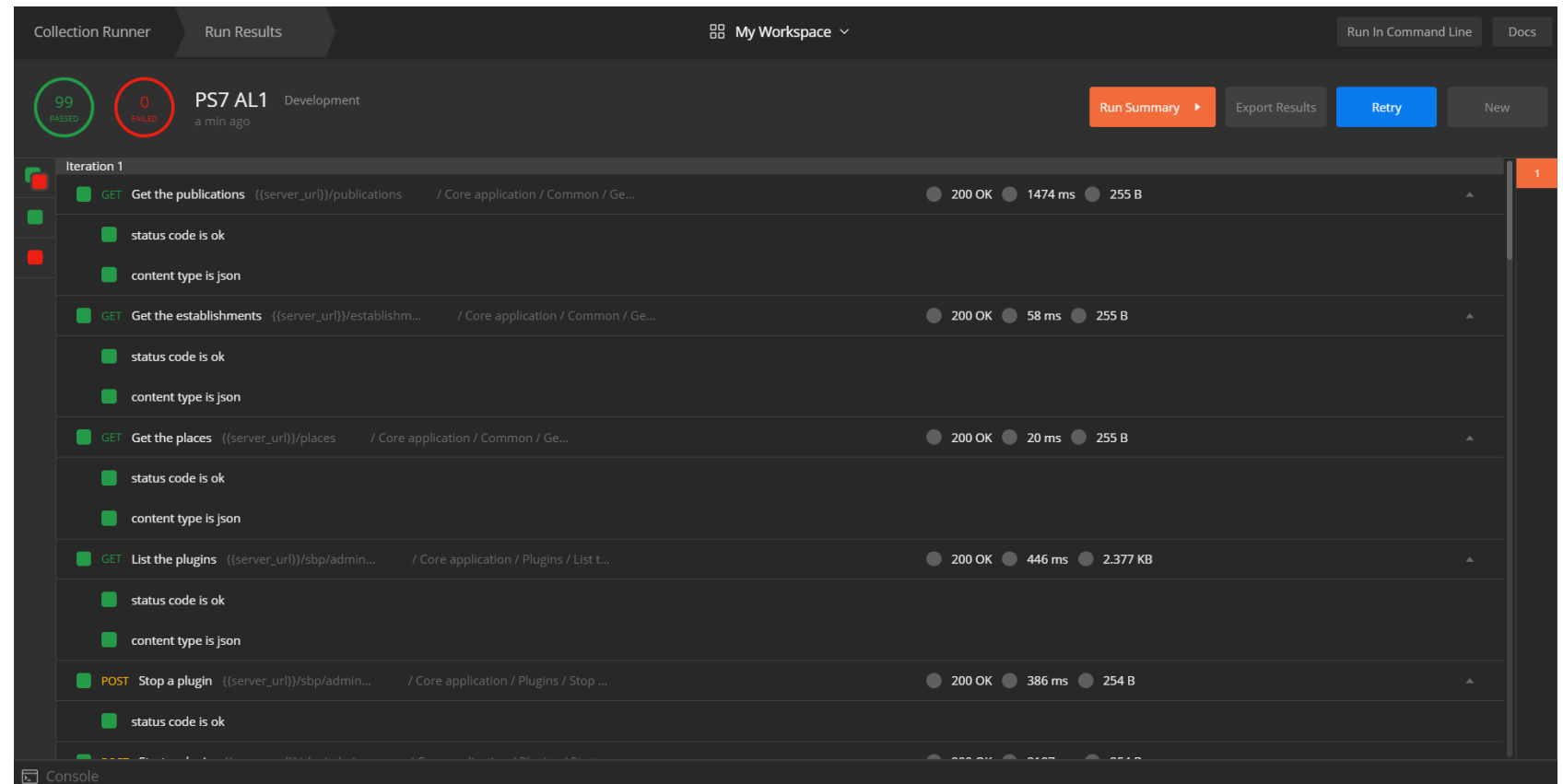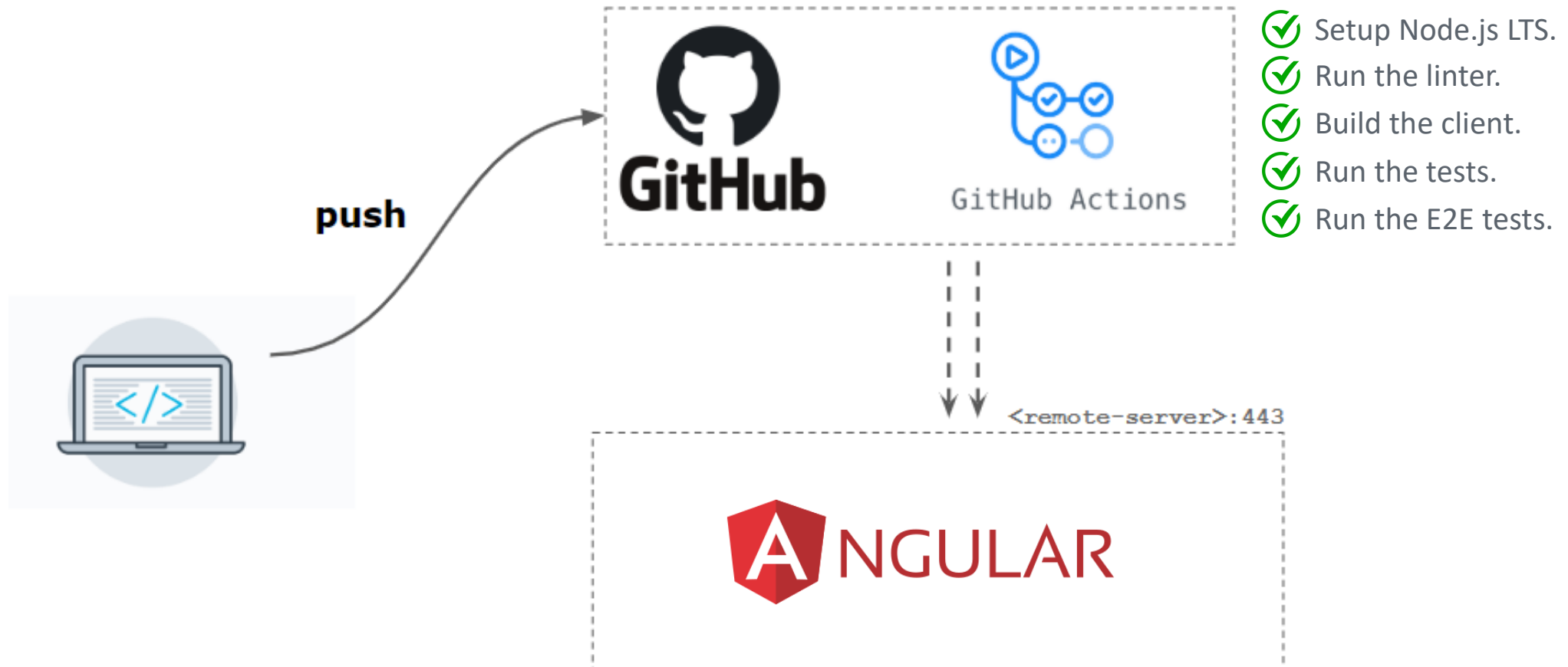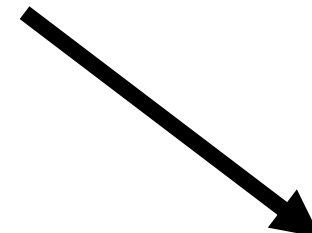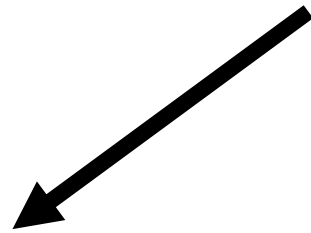
Collection Runner | Run Results | 88 My Workspace ⌄ | Run In Command Line | Docs

99 PASSED | 0 FAILED | **PS7 AL1** Development | Run Summary ▶ | Export Results | Retry | New
a min ago

Iteration 1

| GET | Get the publications | {{server_url}}/publications | / Core application / Common / Ge... | 200 OK | 1474 ms | 255 B |

status code is ok

content type is json

| GET | Get the establishments | {{server_url}}/establishm... | / Core application / Common / Ge... | 200 OK | 58 ms | 255 B |

status code is ok

content type is json

| GET | Get the places | {{server_url}}/places | / Core application / Common / Ge... | 200 OK | 20 ms | 255 B |

status code is ok

content type is json

| GET | List the plugins | {{server_url}}/sbp/admin... | / Core application / Plugins / List t... | 200 OK | 446 ms | 2.377 KB |

status code is ok

content type is json

| POST | Stop a plugin | {{server_url}}/sbp/admin... | / Core application / Plugins / Stop ... | 200 OK | 386 ms | 254 B |

status code is ok

Console

PROJECT TESTS

push

GitHub

GitHub Actions

- ✅ Setup Node.js LTS.
- ✅ Run the linter.
- ✅ Build the client.
- ✅ Run the tests.
- ✅ Run the E2E tests.

`<remote-server>:443`

ANGULAR

PROJECT DEPLOYMENT

Databases

Server

Client

PROJECT DOCUMENTTION

AGILE METHODOLOGY

QUESTION TIME !

PF4J - Update

can use

can use

can use

Server

Check plugin versions

Up-to-date plugins + Sha512sum

Plugin Repository