# **Spring Projects**

for Microservices Architecture

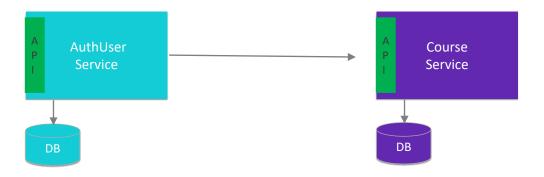
# Spring Web MVC

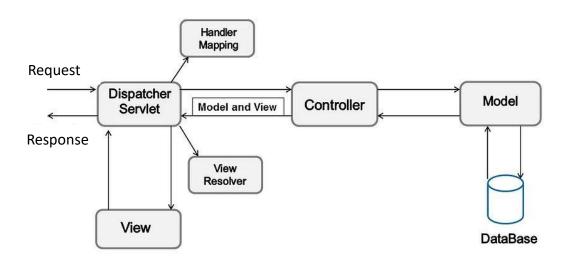
@Controller

@RestController

@RequestMapping

```
<dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-web</artifactId>
</dependency>
```





# Spring Validation

@Validated @NotNull

@Size @NotEmpty

@Email @NotBlank

```
<dependency>
  <groupId>org.springframework.boot</groupId>
  <artifactId>spring-boot-starter-validation</artifactId>
</dependency>
```

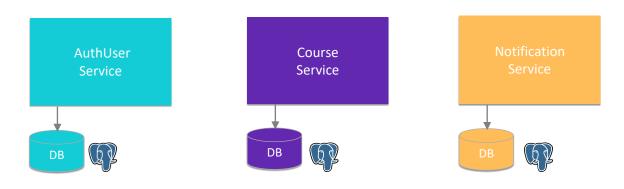
```
@NotBlank
private String name;
@NotBlank
private String description;
@Email
private String email;
@Size(min = 4, max = 50)
private String username;
```

# Spring HATEOAS 😩

```
"userId": "9743eddb-31d5-43a7-9986-e20a900d6bbd",
     "username": "michellibrito",
     "email": "contato@michellibrito.com",
     "fullName": "Michelli Brito Teste",
     "userStatus": "ACTIVE",
     "userType": "STUDENT",
     "phoneNumber": "+5511987542587",
     "cpf": "12598456985",
     "imageUrl": "teste-image-validated",
     "creationDate": "23-09-2021 21:42:26",
     "lastUpdateDate": "25-09-2021 13:02:47",
     "<mark>links</mark>": [
            "rel": "self",
            "href": "http://localhost:8087/users/9743eddb-31d5-43a7-9986-e20a900d6bbd'
<dependency>
  <groupId>org.springframework.boot
  <artifactId>spring-boot-starter-hateoas</artifactId>
</dependency>
```

```
public class UserModel extends RepresentationModel<UserModel> implements Serializable {
   user.add(linkTo(methodOn(UserController.class).getOneUser(userId)).withSelfRel());
```

### Spring Data JPA



```
public interface RoleRepository extends JpaRepository<RoleModel, UUID> {
    Optional<RoleModel> findByRoleName(RoleType name);
}
```

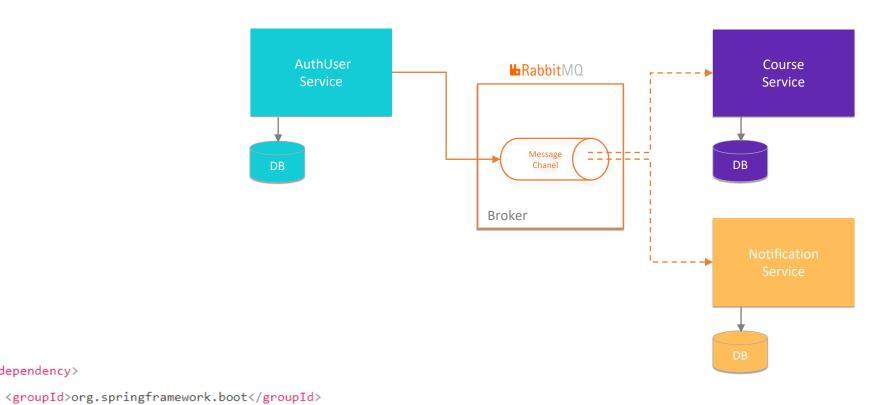
```
<dependency>
  <groupId>org.springframework.boot</groupId>
  <artifactId>spring-boot-starter-data-jpa</artifactId>
</dependency>
```

# 

<artifactId>spring-boot-starter-amqp</artifactId>

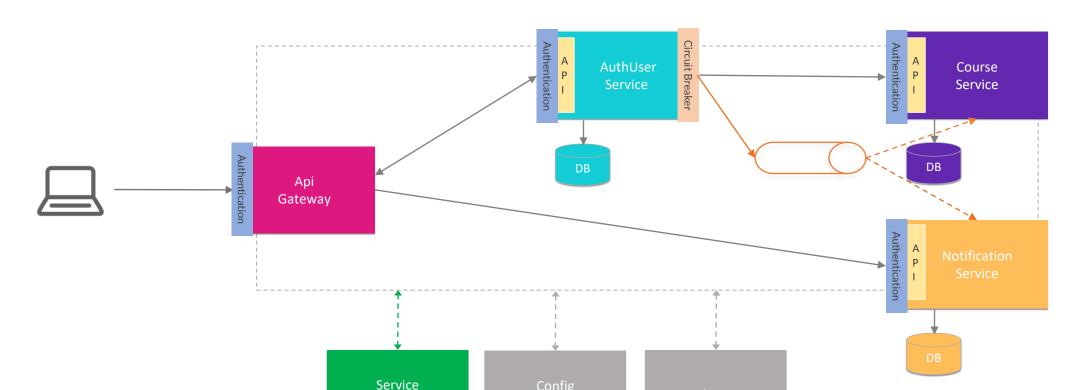
<dependency>

</dependency>



#### Spring Cloud Netflix Eureka

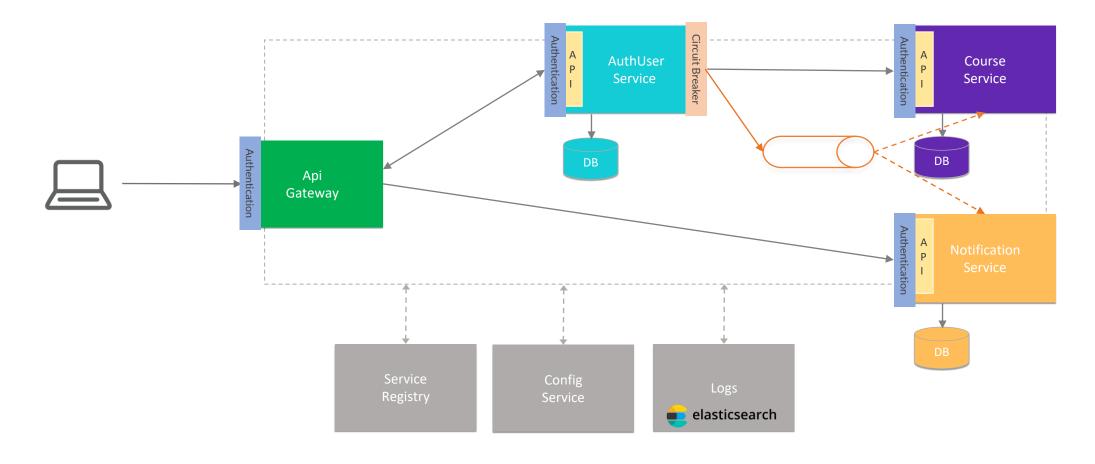
Registry



**elasticsearch** 

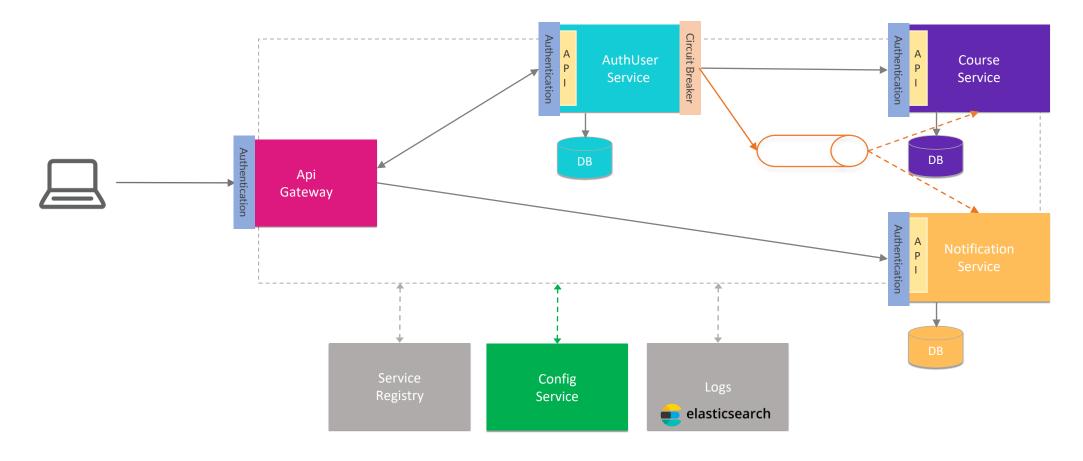
```
<dependency>
    <groupId>org.springframework.cloud</groupId>
    <artifactId>spring-cloud-starter-netflix-eureka-server</artifactId>
</dependency>
```

# Spring Cloud Gateway



```
<dependency>
  <groupId>org.springframework.cloud</groupId>
  <artifactId>spring-cloud-starter-gateway</artifactId>
</dependency>
```

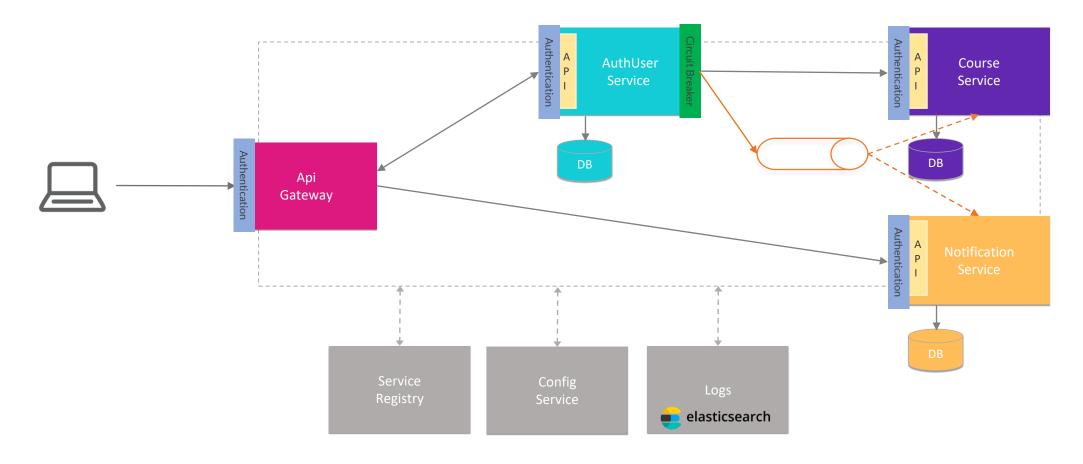
# Spring Cloud Config



```
<dependency>
  <groupId>org.springframework.cloud</groupId>
  <artifactId>spring-cloud-config-server</artifactId>
</dependency>
```

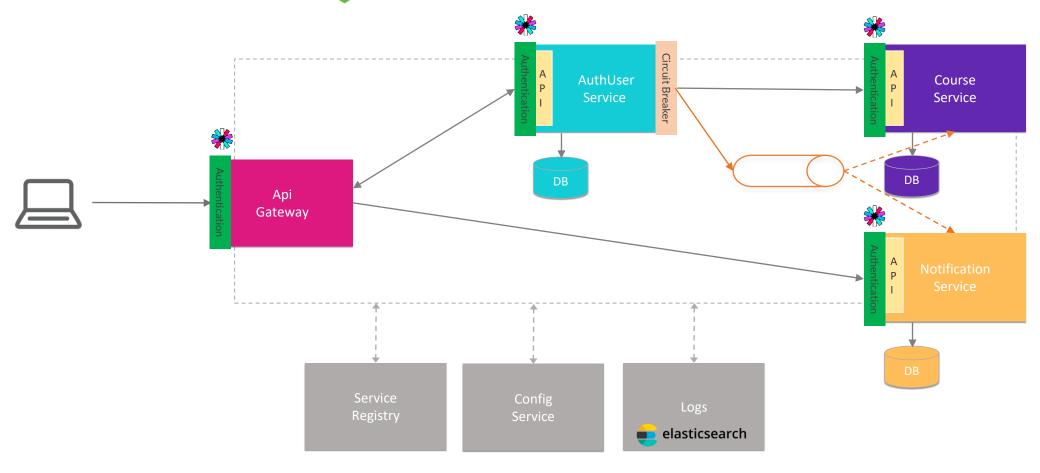
# Spring Cloud Circuit Breaker Resilience4J (





```
<dependency>
 <groupId>org.springframework.cloud
 <artifactId>spring-cloud-starter-circuitbreaker-resilience4j</artifactId>
</dependency>
```

# Spring Security



```
<dependency>
  <groupId>org.springframework.boot</groupId>
  <artifactId>spring-boot-starter-security</artifactId>
</dependency>
```

#### Microservices Architecture with Spring - EAD

