Spring framework -- boot

Managing the dependencies

starter projects

Spring Initializr

>mvn <options>

>mvnw <options>

JSP-jstl view template

ViewMArker

Tiles

Velocity

Thymeleaf

Mustache

starter-parent

Spring boot config

1. through dependency in pom.xml

certain default config is auto activated

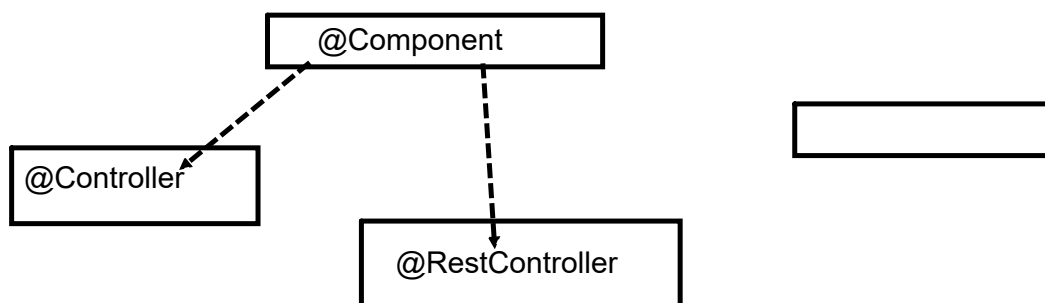2. activates the key-value (properties) based config

application.properties

application.yml

3. std folder structure

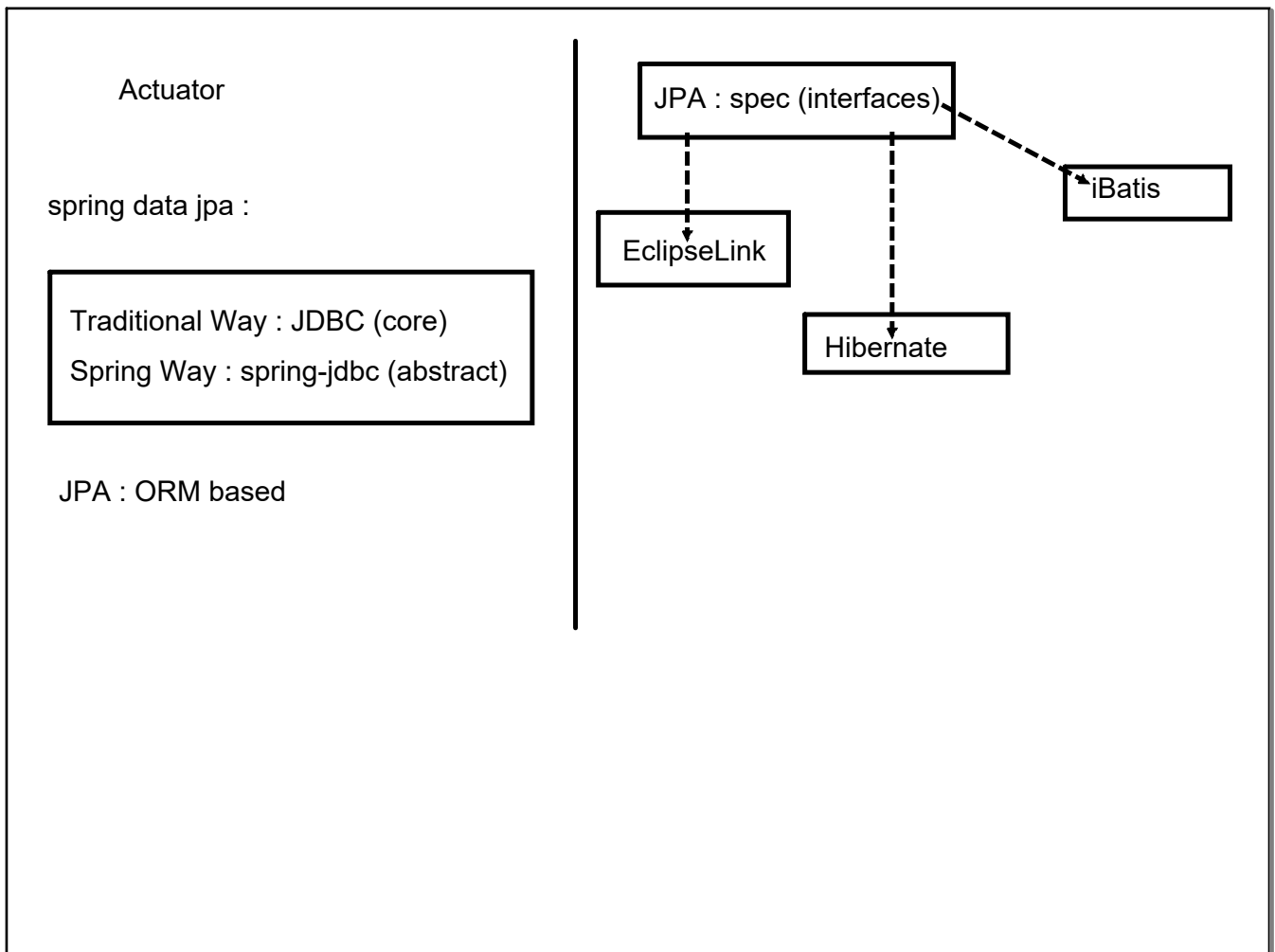4. Exposes specially curated Annotations

@component

@Component

@Controller

@RestController
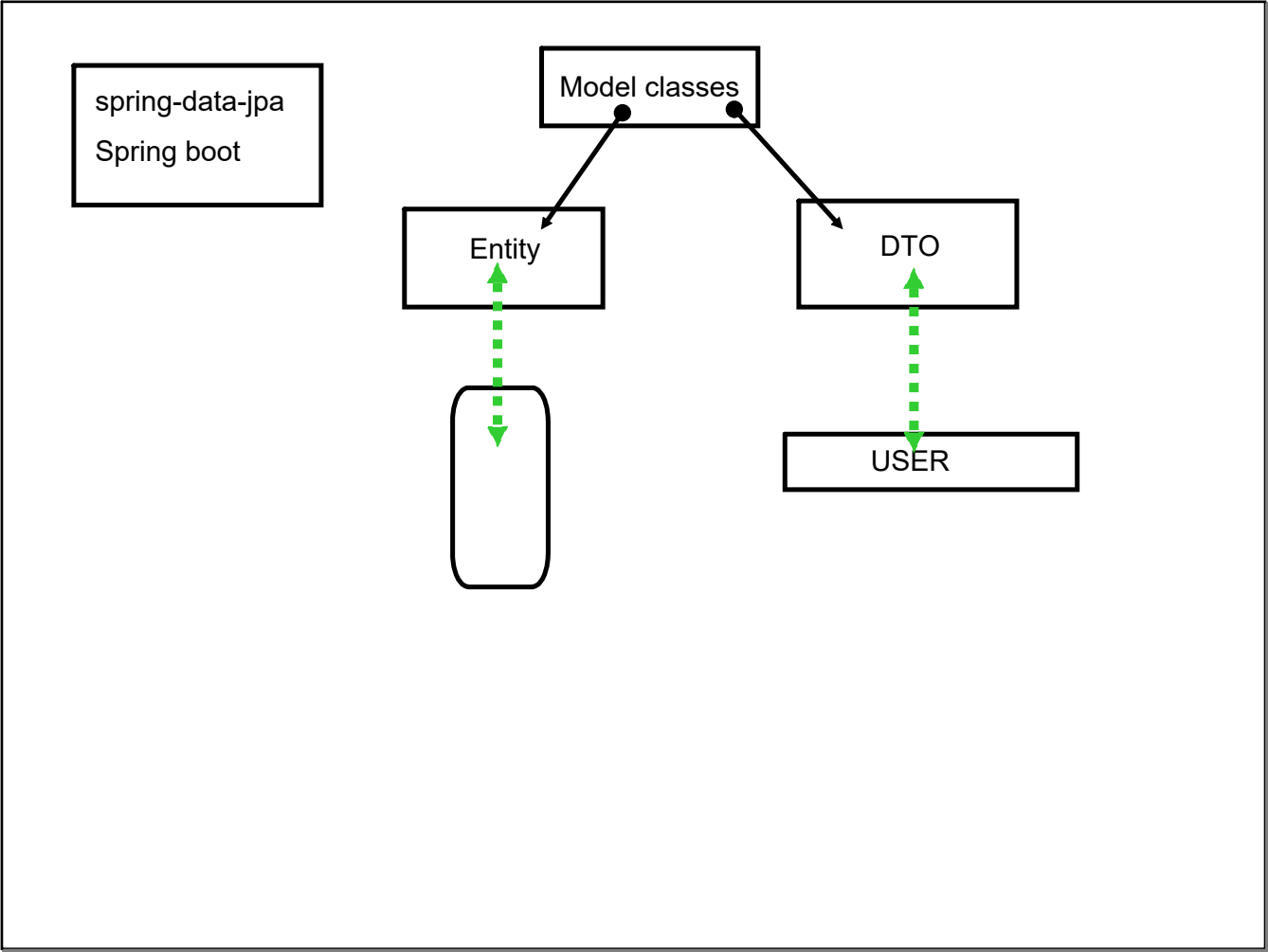
Response is treated as data (Response Data)

supports auto conversion of POJO & JSON (jackson-databind project)

devtools

Actuator

spring data jpa :

```
Traditional Way : JDBC (core)

Spring Way : spring-jdbc (abstract)
```

JPA : ORM based

JPA : spec (interfaces)

EclipseLink

Hibernate

iBatis

spring-data-jpa

Spring boot

Model classes

Entity

DTO

USER

Any DB interaction needs JDBC config

    db name

    location

    user name

    password

    driver (auto detect the driver based on URI)

JPA

    custom config for JPA

Hibernate

    custom config for Hibernate

SQL : dialect
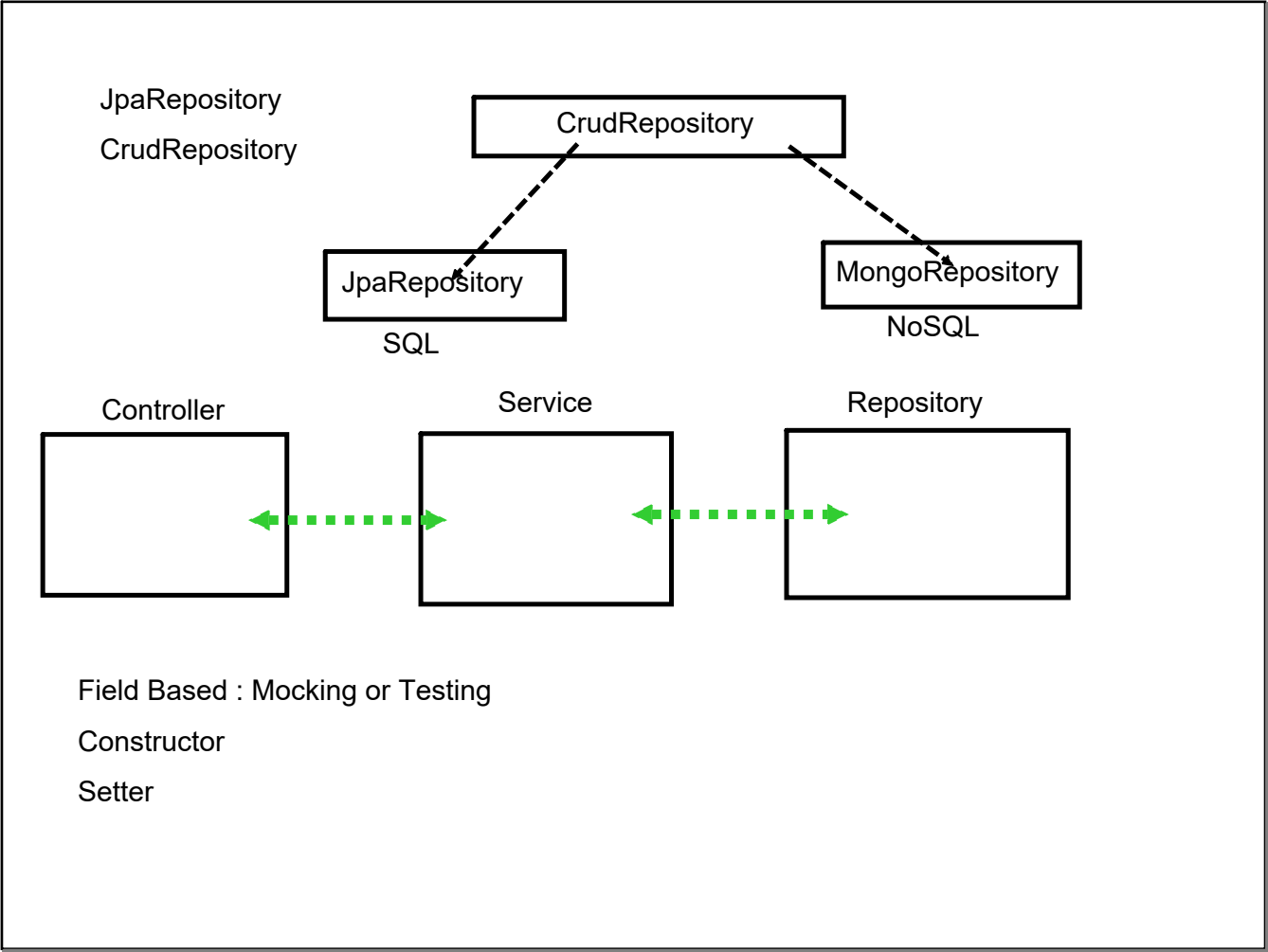
  DataSource

    (interface)

JPA--> Repository : Entity

Interfaces containing basic
CRUD functionalities pre-coded

Custom Interface and inherit
Repository interface

    #associate with entity

    # platform for custom
    implementation

JpaRepository

CrudRepository

```
┌─────────────────────────┐
│      CrudRepository      │
└─────────────────────────┘
```

```
┌─────────────────┐              ┌──────────────────────┐
│  JpaRepository   │              │  MongoRepository     │
└─────────────────┘              └──────────────────────┘
        SQL                              NoSQL
```

Controller   Service   Repository

Field Based : Mocking or Testing

Constructor

Setter

Product Controller

CRUD functionality

/products : GET : fetch all records

/products/id : GET

/products : POST

/products : PUT

/products/id : DELETE

Status Code
Headers
Response Body

Spring Security Project

Filter

Client

Filter

Security

WebSecurityConfigurerAdapter
csrf : form based

Secure Resource

Config

File