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# Java

## Stream Api

### Filter

### Map

### Grouping function

## Collection

# Spring Boot

## Rest Controller

## Bean

If @Bean class has some exception cause could not load then it cause entire SprignBoot Instance server will down so take in design .

Component

## Service

## JPA

### Composite PK : Create separate class

In main Entity Class use @EmbeddedId rather than @ID

### Pagination

findByStatus(Long status,Pagable page); //2,PageRequest.of(pagenumber\_0,page\_size\_50,sortbt(Sorts.Direction.ASC,”status”)

## Native Query

Repository with native ,

JDBC template : Batch update ,Insert

### Entity manager

use in complex query like Virtual Entity class with native query

Virtual Entity class: is class With only[ @Entity @Data /Lombok]no @Table and use this in Native query response , native query can be based on n number of table just use in any Real JPA repository

# Application.yml

Environment variable ( System.setProperty() in Application.yml can read from Spring Config or Kubernate env variable in prod

To read from resource folder use x.y.z=’classptah:/anyfile.txt’

## Batch Job

## Others

### Mapper

### Date handling

# Testing

## Unit testing

Whenever possible use @Springtest & @MockBean as some time Mockito Extention does not mock class in child level .

Mocito is good for utility class or non SpringContext level

## Controller

@WebMVC @ContextConfiguration @MockBeans @MockMultipartFile

MainApplication(SpringBoot)

@ExtendsWith (SpringExtens.java)

## Service

@ExtendsWith (MokitoExtention.java)

@InjectMocks mainService

@Mocks /~~@MockBean~~ Other Service

MockedStatic,ReflectiontestUtil

Exception :arretThrows(Exceptionxyz.class()->{})

Envvaribale

1: Create application.yml in test and add env variable with dummy value

2: @TestPropertySource(properties = {"myproperty = foo"})

Or

static {

System.setProperty("myproperty", "foo");//direct in test method withour static

}

@Capture

ArgumentCapture<ABC.Class> classAbc;

File : Path fileclass;

@SnekyThrows

## JPA

## Entity manager

## Utility Class

@SpringBootTest

## Integration test

## Wire Mock

# Kafka

# NOS SQL DB

# Dev Ops

Ci/Cd

# Architecture

# Micro services

## 12 factors App

# Angular

Node

Component

Service

Directives

3rd party Lib

Tabular data

Model window /popup

Form :

Text , radio,checkbox,Text area,date field

Validation & error message display

## Angular Test case:

### Unit test case

If you use Angular Interface to set data force you add add field

So better use

varInterfaceA= {

//few field data

} rather than using

varInterfaceA = InterfaceA{

//required all fields data either real or enpty

}

#### Component

Each method

#### Template /HTML

#### Service

Mocking

Jasmine.createSpy

spyOn( (component as any).xyzService,‘serviceMethod’).and.retrurnValue(mockData);

expect((component as any).xyzService. serviceMethod’()).toHaveBeencalled();//.toBeTruthty()