**Case Study 1: Employee Info API using Spring Boot AutoConfiguration**

**EmployeeApiApplication.java**

package com.company.employeeapi;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

public class EmployeeApiApplication {

public static void main(String[] args) {

SpringApplication.run(EmployeeApiApplication.class, args);

}

}

**EmployeeController.java**

package com.company.employeeapi.controller;

import org.springframework.web.bind.annotation.GetMapping;

import org.springframework.web.bind.annotation.RestController;

import java.util.Map;

@RestController

public class EmployeeController {

@GetMapping("/employee")

public Map<String, Object> getEmployee() {

return Map.of(

"id", 101,

"name", "John Doe",

"department", "Engineering"

);

}

}

**application.properties**

server.port=8081

**2. Spring Boot – Actuators**

**InventoryMonitorApplication.java**

package com.company.inventorymonitor;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

public class InventoryMonitorApplication {

public static void main(String[] args) {

SpringApplication.run(InventoryMonitorApplication.class, args);

}

}

package com.company.inventorymonitor;

import org.springframework.web.bind.annotation.GetMapping;

import org.springframework.web.bind.annotation.RestController;

import java.util.List;

import java.util.Map;

@RestController

public class InventoryController {

@GetMapping("/inventory")

public List<Map<String, Object>> getInventory() {

return List.of(

Map.of("id", 1, "product", "Laptop", "stock", 50),

Map.of("id", 2, "product", "Keyboard", "stock", 200)

);

}}