Week 6 Day 5

Integration Testing

Spring Boot Profiles

REVATURE

Allows you to map beans to different profiles

- Allows for best practices of separating working environments
- Map a bean to specific environment with @Profile(“environmentName”)
- Set the active profile in application properties with spring.properties.active=‘environment’
- Create separate .properties files for specific setups for profiles

Integration Testing Introduction

REVATURE

- Testing a combination of multiple units/modules
- Exposes defects in the interaction between units
- Make use of JUnit, Mockito, and Spring Testing Features

```
115     @Test
116     @Transactional
117     public void getUserInfo() throws Exception {
118
119         User u = ur.save(new User("first", "last", "test", "test@email.com", "password"));
120
121         mockMvc.perform(get("/user?id="+u.getUserId()))
122                 .andDo(print())
123                 .andExpect(status().isOk())
124                 .andExpect(jsonPath("$.firstName").value("first"))
125                 .andExpect(jsonPath("$.lastName").value("last"))
126                 .andExpect(jsonPath("$.username").value("test"))
127                 .andExpect(jsonPath("$.email").value("test@email.com"))
128                 .andExpect(jsonPath("$.password").value("password"))
129                 .andExpect(jsonPath("$.posts").value(new ArrayList<Post>()));
130
131     }
132
133 }
```

Spying with Mockito

REVATURE

Spying is another use of Mockito which allows for the watching of class methods

- Could be useful in integration testing
- Useful to make sure correct methods were called
- Also allows for overriding original method logic

```
@Spy
List<String> spyList = new ArrayList<String>();

@Test
public void whenUsingTheSpyAnnotation_thenObjectIsSpied() {
    spyList.add("one");
    spyList.add("two");

    Mockito.verify(spyList).add("one");
    Mockito.verify(spyList).add("two");

    assertThat(aSpyList).hasSize(2);
}
```

https://www.baeldung.com/mockito-spy