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Entity Model Code:

```
Users.java X
1 package com.UnitTestingMockito.model;
2
3 import jakarta.persistence.Table;
4
5 import jakarta.persistence.Entity;
6 import jakarta.persistence.Id;
7
8 @Entity
9 @Table(name="userMockito")
10 public class Users {
11     @Id
12     private Long userid;
13     private String name;
14     public Long getId() {
15         return userid;
16     }
17     public void setId(Long id) {
18         this.userid = id;
19     }
20     public String getName() {
21         return name;
22     }
23     public void setName(String name) {
24         this.name = name;
25     }
26     public Users() {
27         // TODO Auto-generated constructor stub
28     }
29     public Users(Long id, String name) {
30         this.userid = id;
31         this.name = name;
32     }
33
34
35
36 }
37
```

User Repository Code

```
nitTestingMockito/repository/UserRepo.java - Spring Tools for Eclipse
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1 package com.UnitTestingMockito.repository;
2
3 import org.springframework.data.jpa.repository.JpaRepository;
4 import org.springframework.stereotype.Repository;
5
6 import com.UnitTestingMockito.model.Users;
7
8 @Repository
9 public interface UserRepo extends JpaRepository<Users, Long>{
10
11 }
12
```

User Service Code

```
to/service/UserService.java - Spring Tools for Eclipse
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1 package com.UnitTestingMockito.service;
2
3 import org.springframework.stereotype.Service;
4
5 import com.UnitTestingMockito.model.Users;
6 import com.UnitTestingMockito.repository.UserRepo;
7
8 @Service
9 public class UserService {
10     private final UserRepo userRepository;
11     public UserService(UserRepo userRepository) {
12         this.userRepository = userRepository;
13     }
14
15     public String getUserByNameById(Long id) {
16         return userRepository.findById(id)
17             .map(Users::getName)
18             .orElse("Unknown");
19     }
20 }
21
```

User Service Test code

est/java/com/UnitTestingMockito/UserServiceTest.java - Spring Tools for Eclipse

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```
16 import com.unittestingmockito.model.Users;
17 import com.UnitTestingMockito.repository.UserRepo;
18 import com.UnitTestingMockito.service.UserService;
19
20 import io.micrometer.core.instrument.Timer;
21 import io.micrometer.prometheus.PrometheusConfig;
22 import io.micrometer.prometheus.PrometheusMeterRegistry;
23
24 @ExtendWith(MockitoExtension.class)
25 class UserServiceTest {
26     @Mock
27     private UserRepo userRepository;
28
29     @InjectMocks
30     private UserService userService;
31
32     @Test
33     void shouldReturnUserName_whenUserExists() {
34         PrometheusMeterRegistry registry = new PrometheusMeterRegistry(PrometheusConfig.DEFAULT);
35         Timer timer = registry.timer("application.process.time");
36         timer.record(()->{
37             Users user = new Users(1L, "Alice");
38             when(userRepository.findById(1L)).thenReturn(Optional.of(user));
39
40             String result = userService.getUserNameById(1L);
41             assertEquals("Alice", result);
42             verify(userRepository).findById(1L);
43         });
44         System.out.println(registry.scrape());
45     }
46
47     @Test
48     void shouldReturnUnknown_whenUserNotFound() {
49         when(userRepository.findById(2L)).thenReturn(Optional.empty());
50         String result = userService.getUserNameById(2L);
51         assertEquals("Unknown", result);
52     }
53
54 }
```

Output:

