

TEST CASES

BACKEND

The screenshot shows an IDE with a project named 'superPrice'. The 'Test Results' tab is active, showing a successful test run for 'testSave_ProductSavedSuccessfully'. The test code is as follows:

```
@Mock
private productRepository productRepository;

@BeforeEach
void setUp() {
    MockitoAnnotations.openMocks(this);
}

@Test
void testSave_ProductSavedSuccessfully() {
    Product productToSave = new Product();
    productToSave.setId(1L);

    Product savedProduct = new Product();
    savedProduct.setId(1L);

    // return product
    when(productRepository.save(productToSave)).thenReturn(savedProduct);

    // save the result
    Product result = productService.save(productToSave);

    // assert
    assertNotNull(result);
    assertEquals(expected:1L, result.getId());
}
```

The test results show that the test passed successfully at 9/17/2023, 10:16:11. The error log is empty.

This is a test to check if a product has been saved successfully in the product repository.

The screenshot shows an IDE with a project named 'superPrice'. The 'Test Results' tab is active, showing a failed test run for 'testFirstPrices1_450'. The test code is as follows:

```
@Test
void testFirstPrices1_450() {
    // test to see if the first price is 1.45
    Price price1 = new Price();
    price1.setId(1L);
    price1.setProductId(1L);
    price1.setPriceValue(1.45);

    List<Price> expectedPrices = new ArrayList<>();
    expectedPrices.add(price1);

    // mocking the behaviour
    when(priceRepository.findAll()).thenReturn(expectedPrices);
    when(productRepository.findById(1L)).thenReturn(Optional.of(new Product()));

    // calling the find all method
    List<Price> actualPrices = productService.findAll();

    // check that the list is not empty
    assertNotNull(actualPrices);
    assertFalse(actualPrices.isEmpty()); // Expected [false] but was [true]

    // check if the first price is 1.45
    assertEquals(expected:1.45, actualPrices.get(0).getPriceValue(), delta:0.001); // Use a delta for comparing double values
}
```

The test results show that the test failed at 9/17/2023, 10:16:11. The error log shows: 'Expected [false] but was [true] org.opentest4j.AssertionFailedError: expected [false] but was [true]'.

This is a test to check if the price of the products matches that what is in the repository

The screenshot shows the Eclipse IDE interface. The left sidebar contains the 'EXPLORER' view with a project tree for 'TEAM-PROJECT-GROUP-P07-05'. The main editor displays the file 'storeServiceTests.java' with the following code:

```
27 @BeforeEach
28 void setUp() {
29     MockitoAnnotations.openMocks(this);
30 }
31
32 @Test
33 void testFindAll_StoresFound() {
34     List<Store> expectedStores = new ArrayList<>();
35     expectedStores.add(new Store(name:"Store A", location:"Location A"));
36     expectedStores.add(new Store(name:"Store B", location:"Location B"));
37
38     // return expectedStores
39     when(storeRepository.findAll()).thenReturn(expectedStores);
40
41     // call find all method
42     List<Store> result = storeService.findAll();
43
44     // assert
45     assertNotNull(result);
46     assertFalse(result.isEmpty()); Expected [false] but was [true]
47     assertEquals(expectedStores.size(), result.size());
48     assertEquals(expectedStores.get(0).getId(), result.get(0).getId());
49     assertEquals(expectedStores.get(1).getId(), result.get(1).getId());
50 }
51
52 @Test
53 void testFindAll_NoStoresFound() {
54 }
```

The bottom of the IDE shows the 'TEST RESULTS' view with the following output:

```
at org.eclipse.jdt.internal.junit.runner.RemoteTestRunner.runTests(RemoteTestRunner.java:529)
at org.eclipse.jdt.internal.junit.runner.RemoteTestRunner.runTests(RemoteTestRunner.java:756)
at org.eclipse.jdt.internal.junit.runner.RemoteTestRunner.run(RemoteTestRunner.java:452)
at org.eclipse.jdt.internal.junit.runner.RemoteTestRunner.main(RemoteTestRunner.java:210)

TRACE
CTESTE 3, testFindAll_StoresFound(au.edu.rmit.sept.superPrice.website.storeServiceTests)
CTESTS 4, testFindAll_NoStoresFound(au.edu.rmit.sept.superPrice.website.storeServiceTests)
CTESTE 4, testFindAll_NoStoresFound(au.edu.rmit.sept.superPrice.website.storeServiceTests)
RUNTIME1413
```

A tooltip on the right indicates a test failure: 'Test run at 9/17/20... testFindAll_StoresFound Expected [false] but was [true] org.opentest4j.AssertionFailedError testFindAll_NoStoresFound'.

This is a test to check if we can return the names of the stores in the store repository using store service.