

Whitebox testiranje

Testovi su rađeni na metodi calculateWithHolidays u DiscountService:

```
public int calculateWithHolidays(int regularPrice,int numberOfCoins, DateTime date) {  
    if (date == null || date < DateTime.Now)  
    {  
        throw new ArgumentException();  
    }  
    double holidayDiscount = 0;  
    if (date.Month == 1 && date.Day == 1)  
    {  
        holidayDiscount = 0.5;  
    }  
    return (int)(regularPrice - (regularPrice * (numberOfCoins / (double)100)) - regularPrice *  
holidayDiscount);  
}
```

Line coverage:

[TestMethod]

```
public void calculateWithHolidays_dateIsNull_throwsException()  
{  
    DiscountService discountService = new DiscountService();  
    DateTime datum = new DateTime();  
    Assert.ThrowsException<ArgumentException>(() => discountService.calculateWithHolidays(100, 50,  
datum));  
}
```

[TestMethod]

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```
public void calculateWithHolidays_invalidDate_throwsException()
{
    DiscountService discountService = new DiscountService();

    DateTime datum = new DateTime(2000, 2, 2);

    Assert.ThrowsException<ArgumentException>(() => discountService.calculateWithHolidays(100, 50,
datum));
}
```

[TestMethod]

```
public void calculateWithHolidays_newYearDiscount_returnsDiscountedPrice()
{
    DiscountService discountService = new DiscountService();

    DateTime datum = new DateTime(2025, 1, 1);

    Assert.AreEqual( 0,discountService.calculateWithHolidays(100, 50, datum));
}
```

[TestMethod]

```
public void calculateWithHolidays_noHolidayDiscount_returnsDiscountedPrice()
{
    DiscountService discountService = new DiscountService();

    DateTime datum = new DateTime(2025, 2, 1);

    Assert.AreEqual(50, discountService.calculateWithHolidays(100, 50, datum));
}
```
