Apex Testing

Get Started with Apex Unit Tests

VerifyDate Apex Class

VerifyDate Apex Class Code:

```
public class VerifyDate {

    //method to handle potential checks against two dates
    public static Date CheckDates(Date date1, Date date2) {
    //if date2 is within the next 30 days of date1, use date2.  Otherwise use the end of the month
    if(DateWithin30Days(date1,date2)) {
    return date2;
    } else {
    return SetEndOfMonthDate(date1);
    }
    }

    //method to check if date2 is within the next 30 days of date1
    @TestVisible private static Boolean DateWithin30Days(Date date1, Date date2) {
    //check for date2 being in the past
        if( date2 < date1) { return false; }


        //check that date2 is within (>=) 30 days of date1
        Date date30Days = date1.addDays(30); //create a date 30 days away from date1
    if( date2 >= date30Days ) { return false; }
    else { return true; }
```

```
}


//method to return the end of the month of a given date
@TestVisible private static Date SetEndOfMonthDate(Date date1) {
Integer totalDays = Date.daysInMonth(date1.year(), date1.month());
Date lastDay = Date.newInstance(date1.year(), date1.month(), totalDays);
return lastDay;
}


}
```

TestVerifyDate:

```
@isTest
private class TestVerifyDate {

  @isTest static void Test_CheckDates_case1(){
    Date D =
VerifyDate.CheckDates(date.parse('01/01/2020'),date.parse('01/05/2020'));
      System.assertEquals(date.parse('01/05/2020'), D);
  }
  @isTest static void Test_CheckDates_case2(){
    Date D = VerifyDate.CheckDates(date.parse('01/01/2020'),date.parse('05/05/2020'));
      System.assertEquals(date.parse('01/31/2020'), D);
  }


  @isTest static void Test_DateWithin30Days_case1(){
    Boolean flag = VerifyDate.DateWithin30Days(date.parse('01/01/2020'),
date.parse('12/30/2019'));
    System.assertEquals(false, flag);


  }
```

```
@isTest static void Test_DateWithin30Days_case2(){

    Boolean flag = VerifyDate.DateWithin30Days(date.parse('01/01/2020'),
date.parse('02/02/2019'));

    System.assertEquals(false, flag);


}
@isTest static void Test_DateWithin30Days_case3(){

    Boolean flag = VerifyDate.DateWithin30Days(date.parse('01/01/2020'),
date.parse('01/15/2020'));

    System.assertEquals(true, flag);


}
@isTest static void Test_SetEndOfMonthDate(){

    Date returndate = VerifyDate.SetEndOfMonthDate(date.parse('01/01/2020'));

}
}
```