

Tests and results

There are a total of 31 functions that act as tests for validating that all the functionalities of the triggers, classes that handle the triggers and a custom controller work as expected, I am not going to going to go into full detail about what each function does, but generally the main functionalities that the testing functions verify are the following:

1. Discounts are applied correctly based on the amount of subjects enrolled, scholarships and payment method (if it is payment in full there is a 5% discount).
2. Total discount does not exceed the 60% or else it is supposed to automatically do adjustment so the discount remains below 60%.
3. The Visualforce custom controller works as expected when passed a valid Quote Id and it does not work when passed an invalid Quote Id.
4. The calculation of the Partial_Payment__c custom field is made once the "Status" field of Quote is set to "Approved".
5. PDF creation is successful when the Partial_Payment__c custom field is set a value.

Results of every test made:

✓	707ak00000Bec1A	Sun Nov 17 2024 17:52:03 GM...	0	30
✓	TestCheckChangeInAverageHandler		0	1
✓	TestUpdateQuoteLineItemsTrigger		0	30

Code coverage in all classes, triggers and Visualforce custom controller:

Overall Code Coverage			
Class	Percent	Lines	
Overall	99%		^
CheckChangeInAverage	100%	1/1	
CheckChangeInAverageHandler	100%	24/24	
EmailPDFController	97%	44/45	
updateQuoteLineItems	100%	1/1	
updateQuoteLineItemsHandler	100%	180/180	v

The reason why there is a 97% code coverage in EmailPDFController is because of this line:

```
PageReference invoicePDF = new PageReference(
Blob quoteBlob;
if (!test.isRunningTest()){
    quoteBlob = invoicePDF.getContent();
}
else {
    quoteBlob = blob.valueOf('Test');
}
```

That line is not covered since it is not possible to test a PageReference.getContent() because it is considered a callout and callouts cannot be tested.