

APEX TRIGGERS AND CLASSES

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Project Name	CRM Application for Jewel Management

Where declarative automation cannot handle complex conditions, Apex Triggers and Apex Classes were developed.

Examples:

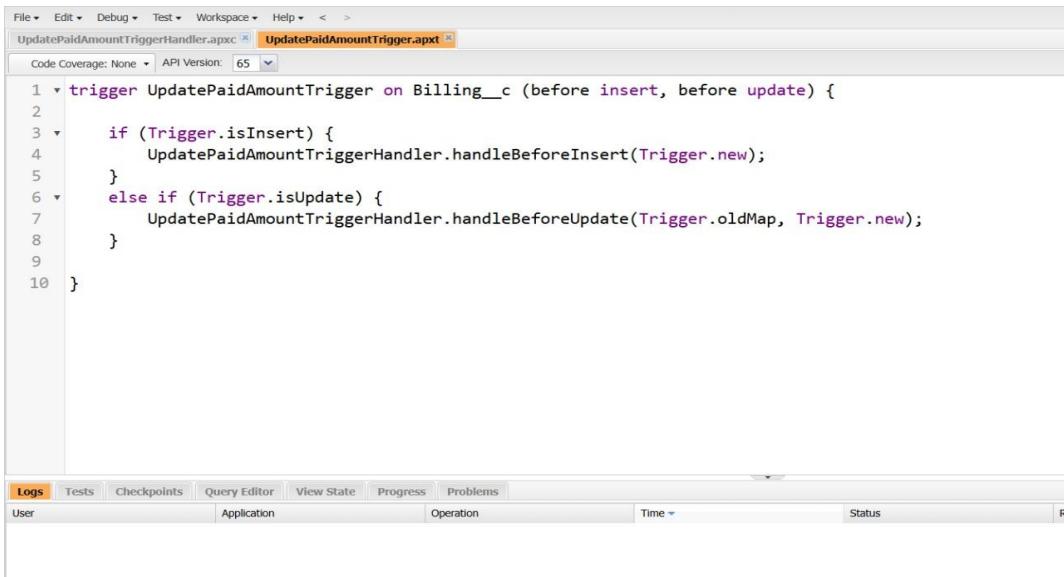
- **Trigger on Order:** Automatically calculate and update total order value based on selected jewelry items.
- **Trigger on Payment:** Update the Payment Status field in the related Order record when full payment is received.
- **Trigger on Jewelry Item:** Automatically change item status to “Out of Stock” when stock quantity reaches zero.



The screenshot shows the Salesforce Developer Console interface. The top navigation bar includes File, Edit, Debug, Test, Workspace, Help, and a search bar. Below the bar, the file path is shown as UpdatePaidAmountTriggerHandler.apex. The code editor displays the following Apex code:

```
1 public class UpdatePaidAmountTriggerHandler {
2
3     public static void handleBeforeInsert(List<Billing__c> newBillings) {
4         for (Billing__c billing : newBillings) {
5             billing.Paid_Amount__c = billing.Paying_Amount__c;
6         }
7     }
8
9     public static void handleBeforeUpdate(Map<Id, Billing__c> oldBillingsMap, List<Billing__c> updatedBillings) {
10        for (Billing__c billing : updatedBillings) {
11            Billing__c oldBilling = oldBillingsMap.get(billing.Id);
12            Decimal oldPaidAmount = oldBilling.Paid_Amount__c;
13            billing.Paid_Amount__c = oldPaidAmount + billing.Paying_Amount__c;
14        }
15    }
16 }
```

Below the code editor, there is a tabs bar with Logs (selected), Tests, Checkpoints, Query Editor, View State, Progress, and Problems. The logs tab shows a single entry: "User Application Operation Time Status Read Size".



```
trigger UpdatePaidAmountTrigger on Billing__c (before insert, before update) {
    if (Trigger.isInsert) {
        UpdatePaidAmountTriggerHandler.handleBeforeInsert(Trigger.new);
    }
    else if (Trigger.isUpdate) {
        UpdatePaidAmountTriggerHandler.handleBeforeUpdate(Trigger.oldMap, Trigger.new);
    }
}
```

Apex Classes were used to implement backend logic for:

- Generating invoices.
- Sending scheduled payment reminders.
- Running daily maintenance batch jobs.

This custom logic provides the system with flexibility and enhances automation accuracy.