

Customer Support Ticketing System

PHASE 5: Apex Programming (Developer)

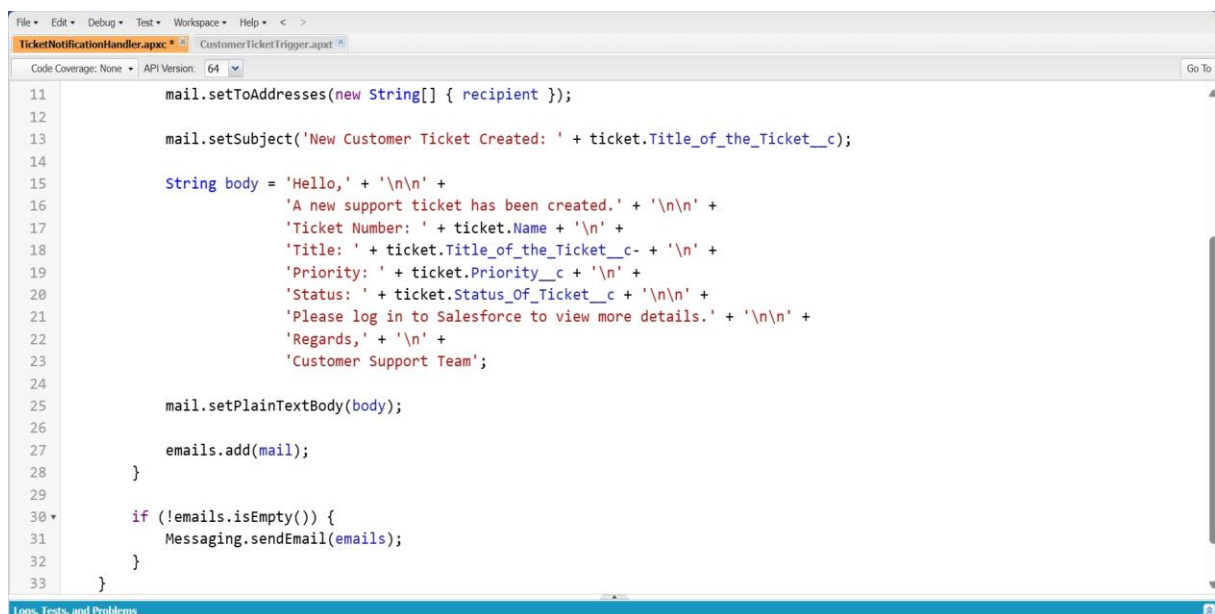
Step 1: Classes & Objects

○ Apex Classes:

Purpose: The **TicketNotificationHandler** Apex class is designed to automate **email notifications** whenever a new Customer Ticket is created.

Project Implementation:

- **TicketNotificationHandler** → Sends email notifications to support agents.
- **CustomerTicketTrigger** → After-insert trigger on `Customer_Ticket__c` that calls **TicketNotificationHandler** automatically whenever a new ticket is created.



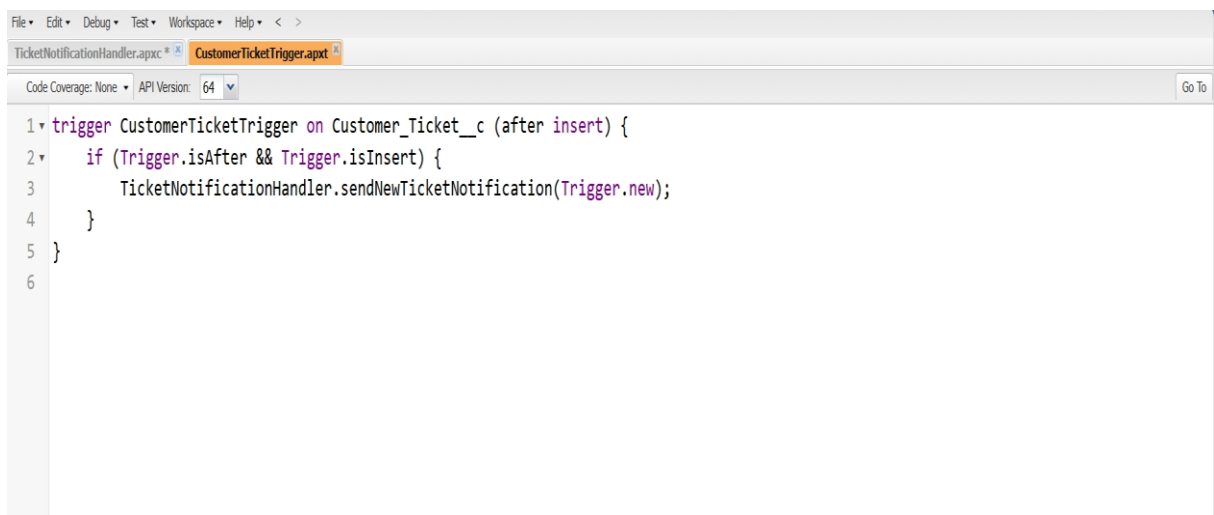
```
11      mail.setToAddresses(new String[] { recipient });
12
13      mail.setSubject('New Customer Ticket Created: ' + ticket.Title_of_the_Ticket__c);
14
15      String body = 'Hello,' + '\n\n' +
16                  'A new support ticket has been created.' + '\n\n' +
17                  'Ticket Number: ' + ticket.Name + '\n' +
18                  'Title: ' + ticket.Title_of_the_Ticket__c + '\n' +
19                  'Priority: ' + ticket.Priority__c + '\n' +
20                  'Status: ' + ticket.Status_Of_Ticket__c + '\n\n' +
21                  'Please log in to Salesforce to view more details.' + '\n\n' +
22                  'Regards,' + '\n' +
23                  'Customer Support Team';
24
25      mail.setPlainTextBody(body);
26
27      emails.add(mail);
28  }
29
30  if (!emails.isEmpty()) {
31      Messaging.sendEmail(emails);
32  }
33  }
```

○ Apex Triggers (after insert):

Purpose: The **CustomerTicketTrigger** runs automatically after a new Customer Ticket is created.

Project Implementation:

- **Trigger Name:** CustomerTicketTrigger
- **Event:** after insert on Customer_Ticket__c
- **Functionality:**
 - Collects newly created **Customer Ticket records**.
 - Calls
TicketNotificationHandler.sendNewTicketNotification to send notification emails.
 - Ensures support agents or managers are notified **immediately** when a ticket is created.



```
1 trigger CustomerTicketTrigger on Customer_Ticket__c (after insert) {
2     if (Trigger.isAfter && Trigger.isInsert) {
3         TicketNotificationHandler.sendNewTicketNotification(Trigger.new);
4     }
5 }
6
```

○ Collections: List, Set, Map

Purpose: Efficiently handle multiple records in Salesforce, avoid duplicates, and improve performance.

Project Implementation:

- Set<Id> → Store Customer Ticket IDs in triggers for bulk processing.
- List<Messaging.SingleEmailMessage> → Send notifications to customers or agents.

```
5 List<Messaging.SingleEmailMessage> emails = new List<Messaging.SingleEmailMessage>();
6
7 for (Customer_Ticket__c ticket : newTickets) {
8     Messaging.SingleEmailMessage mail = new Messaging.SingleEmailMessage();
9
10    String recipient = 'anusha02049@gmail.com';
11    mail.setToAddresses(new String[] { recipient });
12
13    mail.setSubject('New Customer Ticket Created: ' + ticket.Title_of_the_Ticket__c);
14 }
```