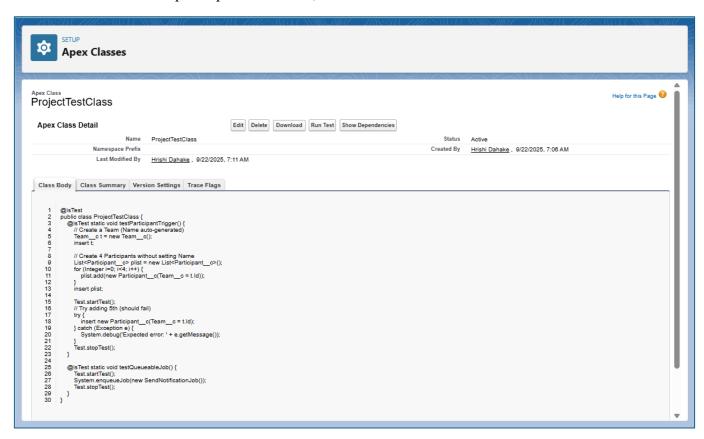
# **Phase 5: Apex Programming**

1. Trigger: Participant Team Limit

**Goal:** Prevent teams from having more than 4 participants.

#### **Implementation:**

- Created ParticipantTeamLimit trigger on Participant c object.
- Trigger runs after insert.
- Checks number of participants in a team; blocks if > 4.



### 2. SOQL Query: Fetch Participants by Skill

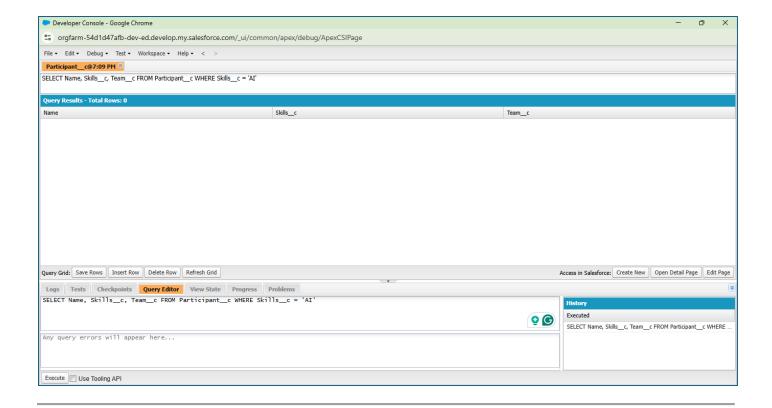
Goal: Fetch participants with specific skills (e.g., "AI").

#### **Implementation:**

• Used Developer Console → Query Editor → Execute SOQL.

#### **Query Example:**

SELECT Name, Skill c, Team c FROM Participant c WHERE Skill c = 'AI'

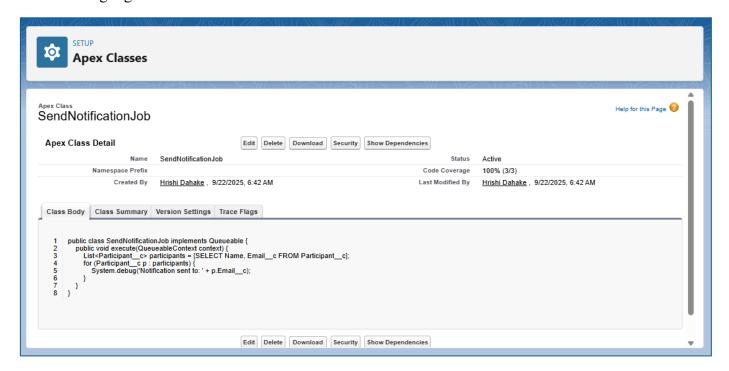


### 3. Queueable Apex: Bulk Notifications

Goal: Send notifications asynchronously to all participants.

#### **Implementation:**

- Created SendNotificationJob class implementing Queueable.
- Debug logs simulate email/SMS notifications.



## 4. Test Class: ProjectTestClass

Goal: Ensure trigger and queueable job run correctly.

## **Implementation:**

- Created ProjectTestClass with @isTest.
- Tests:
  - 1. Trigger prevents adding >4 participants.
  - 2. Queueable Apex runs without errors.