Project Name: Leave Tracker

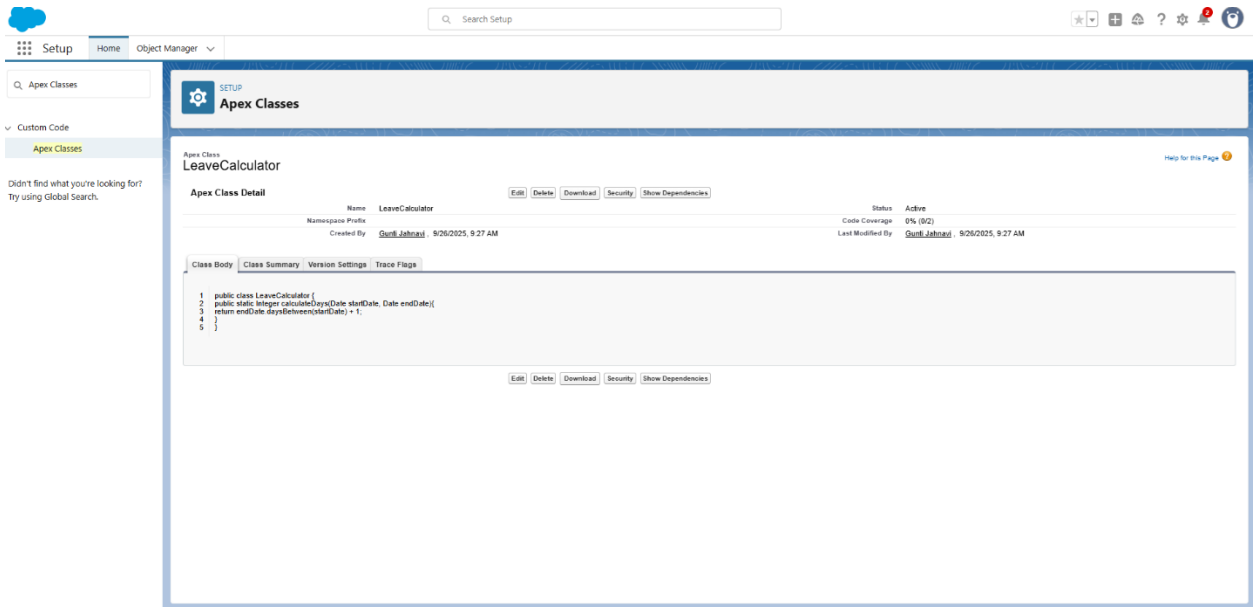
Phase 5 – Apex Programming

1. Classes & Objects ☑ Needed (basic only)

- **Why:** You may create a simple Apex class if you want to perform logic that workflows or process builder cannot handle.
- **In this project:** Mostly not needed because Approval Processes, Field Updates and Tasks already cover your business logic.
- **Step by Step (if you want to try):**
    1. Go to **Setup → Apex Classes → New**.
    2. Paste your class code. Example:

```
public class LeaveCalculator {
    public static Integer calculateDays(Date startDate, Date
endDate){
        return endDate.daysBetween(startDate) + 1;
    }
}
```

    3. Click **Save**.



2. Apex Triggers

Code that runs before/after insert, update or delete. Used for automation beyond workflows. *(Not mandatory for your Leave Tracker unless you want custom logic.)*

3. Trigger Design Pattern

A best-practice way of structuring triggers and handler classes for maintainability. *(Good to know, not required for this project.)*

4. SOQL & SOSL

Salesforce query languages used to fetch records inside Apex. *(Learn basics; only needed if you add Apex logic.)*

5. Collections: List, Set, Map

Data structures inside Apex. *(Understand at a basic level; used when writing any Apex logic.)*

6. Control Statements

if/else, loops, etc. Standard Apex constructs. *(Basic knowledge only.)*

7. Batch Apex / Queueable Apex / Scheduled Apex / Future Methods / Asynchronous Processing

Used for large-volume or time-based processing. *(Not needed for my Leave Tracker project.)*

8. Exception Handling

Try/catch blocks to handle errors in Apex. *(Learn basics if you write custom Apex.)*

9. Test Classes

Required to deploy Apex to Production. *(Only needed if you create Apex classes or triggers.)*