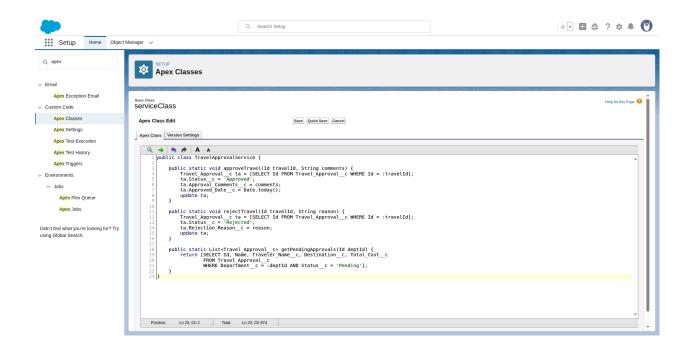
# **Phase 5: Apex Programming (Developer)**

# **Classes & Objects**



# The Code (TravelApprovalService)

Let me break down what this code does:

public class TravelApprovalService {

• Declares a public service class for handling travel approvals

# Method 1: approveTravel (Lines 3-9)

public static void approveTravel(Id travelId, String comments) {

• **Purpose**: Approves a travel request

#### • Parameters:

- o travelId ID of the travel approval record
- o comments Approval comments

#### • Actions:

- Queries the Travel\_Approval\_\_c record using SOQL
- Sets Status to 'Approved'
- Stores the comments
- Sets approval date to today
- Updates the record in database

## Method 2: rejectTravel (Lines 11-16)

public static void rejectTravel(Id travelId, String reason) {

- **Purpose**: Rejects a travel request
- Parameters:
  - o travelId ID of the travel approval record
  - reason Rejection reason

### • Actions:

- o Queries the Travel\_Approval\_\_c record
- Sets Status to 'Rejected'
- Stores the rejection reason
- o Updates the record

# Method 3: getPendingApprovals (Lines 18-22)

public static List<Travel\_Approval\_\_c> getPendingApprovals(Id deptId) {

- **Purpose**: Retrieves all pending travel approvals for a department
- Parameters:
  - $\circ$  deptId Department ID
- **Returns:** List of pending Travel\_Approval\_\_c records
- Query: Selects Id, Name, Traveler\_Name\_\_c, Destination\_\_c,
  Total\_Cost\_\_c where Department matches and Status is 'Pending'

#### **Bottom Status Bar**

• **Position**: Ln 23, Ch 2 (Line 23, Character 2)

• **Total**: Ln 23, Ch 874 (Total of 23 lines, 874 characters)

### **Key Features of This Screen:**

- 1. **Syntax Highlighting** Code is color-coded for readability
- 2. **Line Numbers** Left side shows line numbers
- 3. **Version Control** Version Settings tab allows tracking changes
- 4. **Quick Save** Saves without compiling (faster)
- 5. **Help** Top right has "Help for this Page" link

#### What This Class Does:

This is a **Service Layer** class that handles business logic for travel approvals in a tourism management application. It provides three key operations:

- **M** Approve travel requests
- X Reject travel requests
- | View pending approvals by department

# **SOQL & SOSL in Tourism Management**

- SOQL (Salesforce Object Query Language):
  - Targeted search for specific objects and fields (e.g., finding bookings for a date range).
  - Used for generating reports and retrieving specific customer/booking details.
- SOSL (Salesforce Object Search Language):
  - Full-text search across multiple objects and fields (e.g., finding a customer's details by name/email anywhere).
  - Useful for quickly locating information when the exact location is unknown.

# **Application in Tourism Management:**

- Efficiently manage customer data and streamline booking processes.
- Enhance customer service and generate insights for informed decisions.

### Collections in Tourism Management

• **Collections**: Fundamental data structures for storing and manipulating groups of related data.

### List

- **List**: Ordered collection allowing duplicate values, accessed by index.
- **Application**: Storing sequences like bookings for a day, tour participants, or itinerary steps.

### Set

- **Set**: Unordered collection with no duplicate values, ensuring data uniqueness.
- **Application**: Identifying unique customers, tracking unique destinations, or filtering duplicates.

# Map

- **Map**: Collection of unique key-value pairs for quick data retrieval.
- **Application**: Looking up customer/booking details by ID, storing pricing by package, or tracking availability.