Salesforce Project Phase-4

Smart Education & E-Learning Management System

Phase 4: Process Automation (Admin)

Validation Rules

❖ **Validation Rule 1: Minimum Age for Student**

- **Setup → Object Manager → Student__c → Validation Rules → New**

- **Purpose:** Ensure students are at least 15 years old.

- **Rule Name:** DOB_Minimum_Age

- **Error Condition Formula:**

- Date_of_Birth__c > DATE(YEAR(TODAY()) - 15 , MONTH(TODAY()), DAY(TODAY()))

- **Error Message:** Student must be at least 15 years old.

- **Error Location:** Field → Date_of_Birth__c
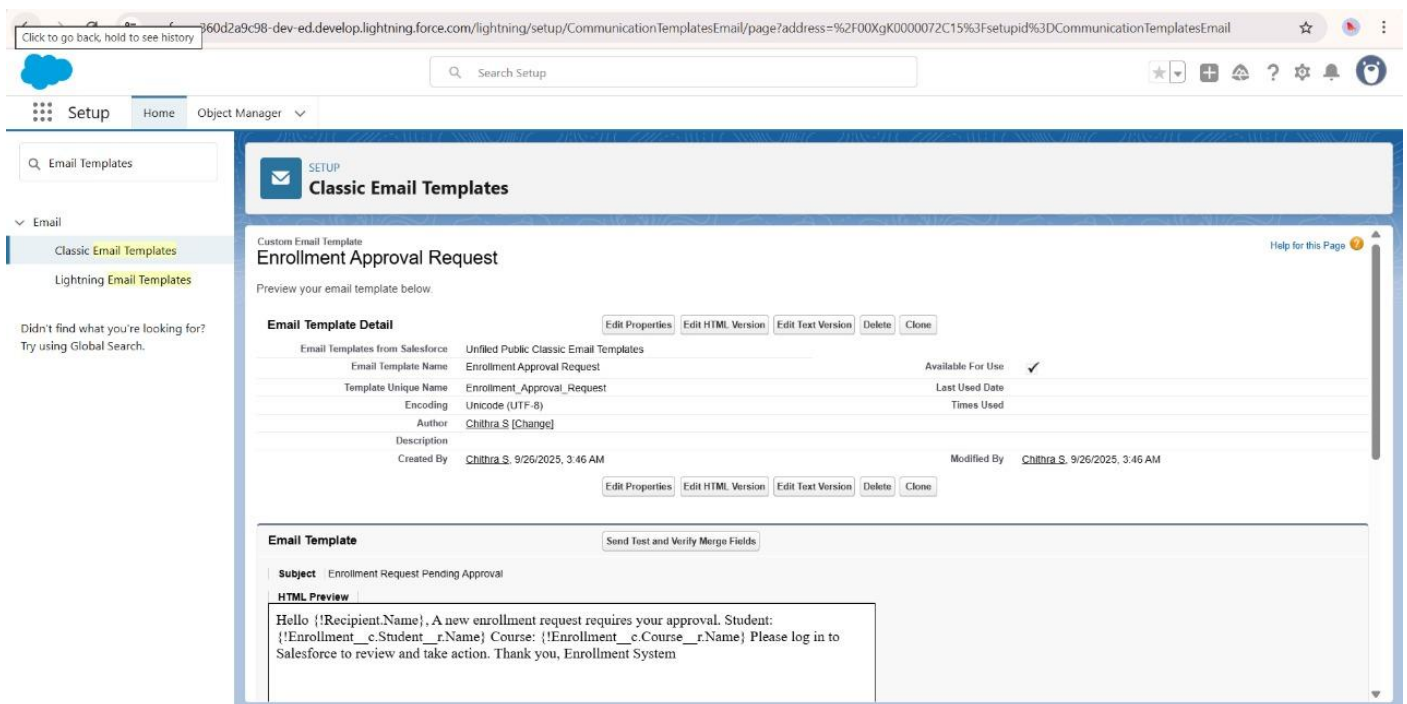

❖ **Validation Rule 2: Completion Percentage**

- **Purpose:** Ensure Completion % is between 0 and 100.

- **Rule Name:** Completion_Valid_Range

- **Error Condition Formula:**

- OR(Completion__c < 0, Completion__c > 100)

- **Error Message:** Completion must be between 0 and 100.

- **Error Location:** Field → Completion__c

Record-Triggered Flows

❖ **Flow 1: Set Submission Status (OnTime / Late)**

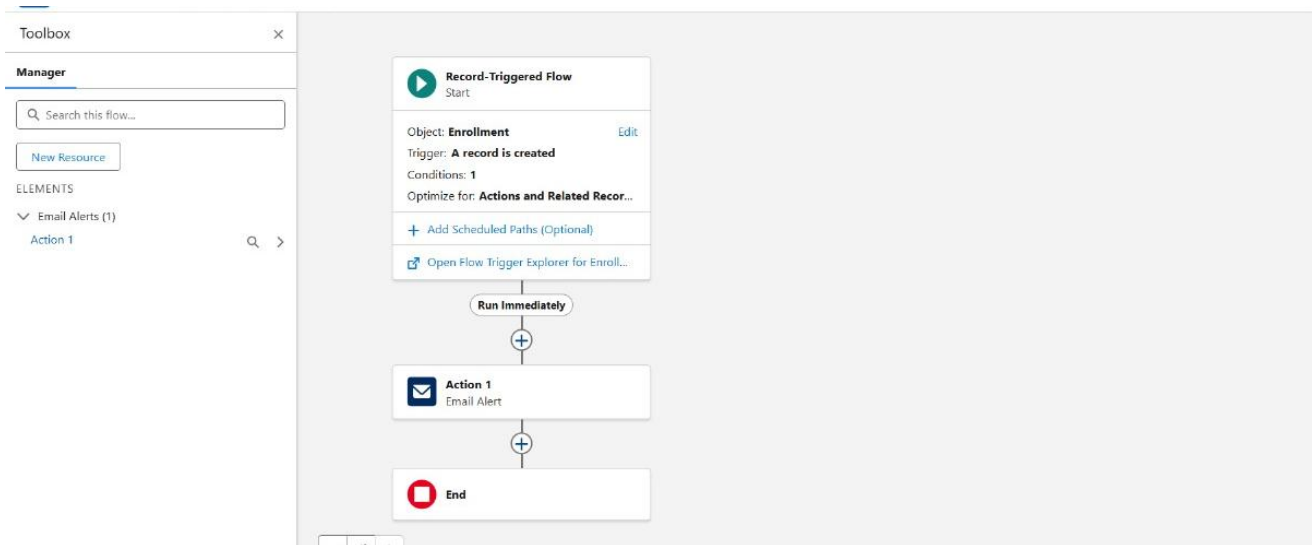- **Setup → Flow → New Flow → Record-Triggered Flow**

- **Object:** Submission__c

- **Trigger:** Record Created (Before Save)

- **Logic:**

  - Get Assignment Due_Date__c

  - If Submission_Date__c ≤ Due_Date__c → Status = OnTime

  - Else → Status = Late

❖ **Flow 2: Auto-Create / Update Progress**

- **Setup → Flow → New Flow → Record-Triggered Flow (After Save)**

- **Object:** Submission__c

- **Logic:**

- Get Progress__c where Student__c = $Record.Student__c AND Course__c = $Record.Assignment__r.Course__c

- If Progress exists → Update Completion / Last Accessed

- Else → Create new Progress record with:

  - Student__c = $Record.Student__c

  - Course__c = $Record.Assignment__r.Course__c

  - Last_Accessed__c = $Record.Submission_Date__c

Email Alerts

❖ **Flow 3: Email Students when New Assignment is Created**

- **Setup → Flow → New Flow → Record-Triggered Flow**

- **Object:** Assignment__c (After Save, on Create)

- **Steps:**

  - Get Enrollment__c where Course__c = $Record.Course__c AND Status = Active

  - Loop through enrollments

  - Action: **Send Email** → To Student__r.Email using Assignment template
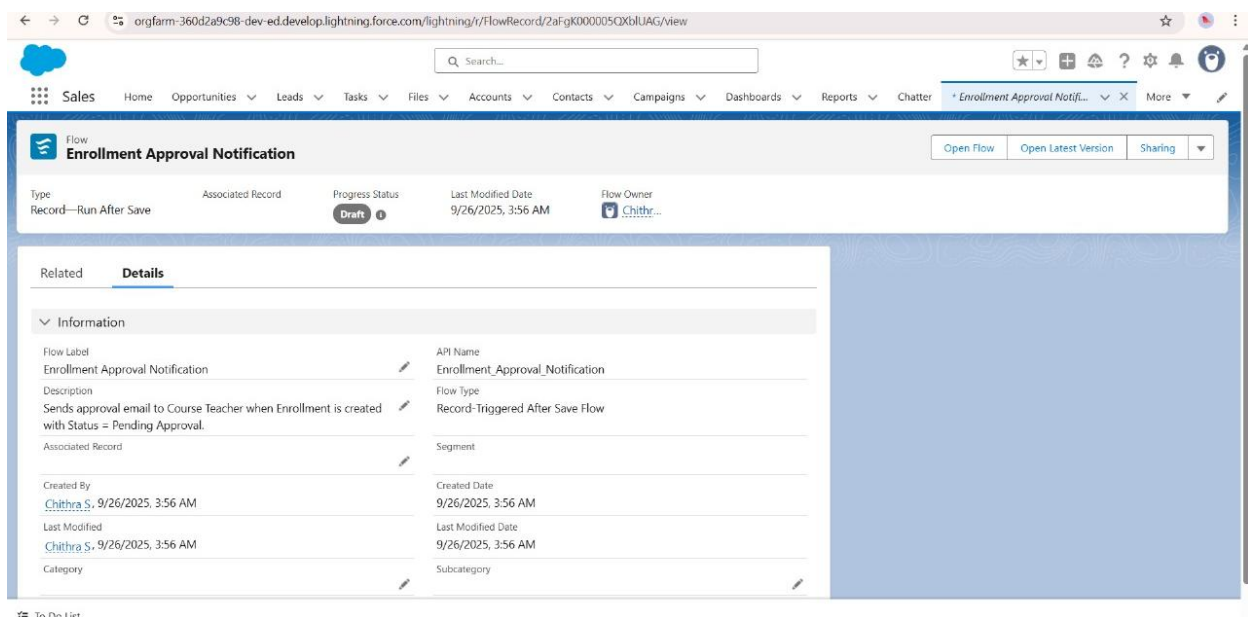
Approval Process

❖ **Enrollment Approval Process**

- **Setup → Approval Processes → New → Standard Wizard**

- **Object:** Enrollment__c

- **Process Name:** Enrollment_Approval

- **Entry Criteria:** Status__c = Pending Approval

- **Approver:** Course__r.Teacher__c

- **Initial Submission Action:** (Optional) Email to Teacher

- **Final Approval Action:**

  - Update Status__c = Approved

  - (Optional) Email to Student

- **Final Rejection Action:**

  - Update Status__c = Rejected

  - (Optional) Email to Student

- **Page Layout Update:** Added Approval History related list to Enrollment__c

Tasks (via Flow)
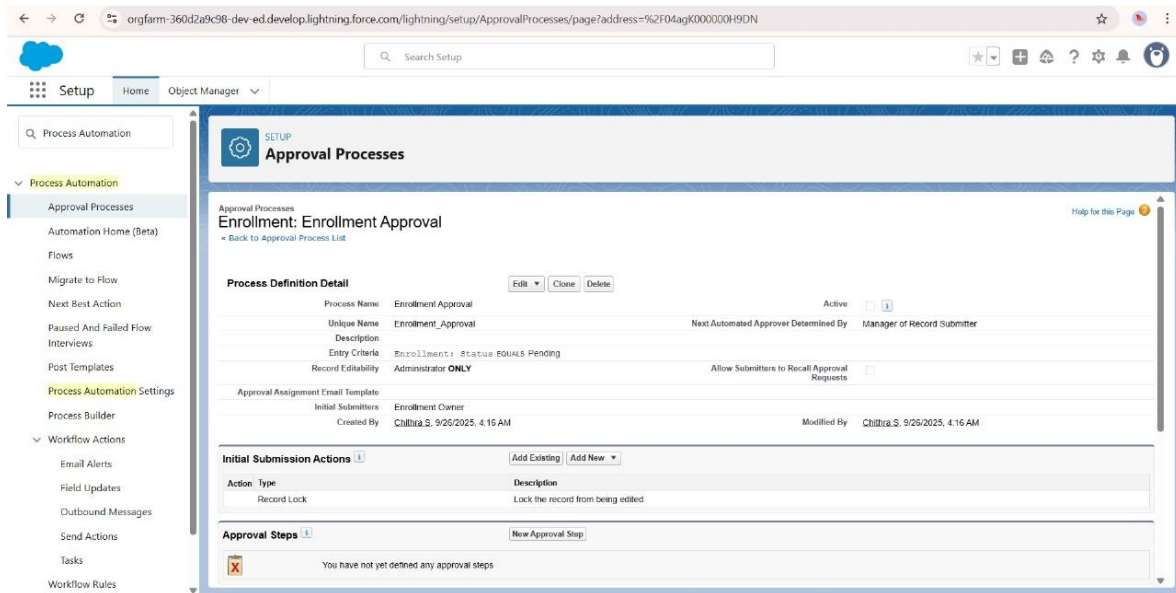
❖ **Late Submission Task**

- **Record-Triggered Flow on Submission__c (After Save)**

- **Condition:** Status__c = Late

- **Action:** Create Task for Teacher

  - Subject: Review Late Submission

  - WhoId: Student__c

  - OwnerId: Assignment__r.OwnerId

Field Updates (via Flow)

❖ **Mark Assignment Overdue**

- **Scheduled Flow → Daily**
- **Get Records:** Assignment__c where Due_Date__c < TODAY() AND Status__c != Overdue
- **Update Records:** Set Status__c = Overdue

Custom Notifications

❖ **Notification Types Created:**

1. Assignment_Due_Reminder → Channels: Desktop, Mobile
2. Late_Submission_Alert → Channels: Desktop, Mobile

❖ **Send Notifications via Flow:**

- Scheduled Flow → Find Assignments due in 48 hours
- Action: Send Custom Notification → Recipient = Student__c