

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:**
 $\text{Date_of_Birth_c} > \text{DATE}(\text{YEAR}(\text{TODAY}()) - 15, \text{MONTH}(\text{TODAY}()), \text{DAY}(\text{TODAY}()))$
- **Error Message:** Student must be at least 15 years old.
- **Error Location:** Field → Date_of_Birth__c

The screenshot displays the Salesforce Object Manager interface for the 'student Validation Rule'. The breadcrumb trail at the top reads: Setup → Home → Object Manager → student Validation Rule. The main content area shows the 'Validation Rule Detail' for the rule named 'DOB_Minimum_Age'. The rule is active, as indicated by a checkmark in the 'Active' column. The 'Error Condition Formula' is set to $\text{Date_of_Birth_c} > \text{DATE}(\text{YEAR}(\text{TODAY}()) - 15, \text{MONTH}(\text{TODAY}()), \text{DAY}(\text{TODAY}()))$. The 'Error Message' is 'Student must be at least 15 years old', and the 'Error Location' is 'Top of Page'. The rule was created by Chithra S. on 9/26/2025 at 2:13 AM and was last modified by Chithra S. on 9/26/2025 at 2:13 AM. The interface includes 'Edit' and 'Clone' buttons for the rule details. The bottom of the screen shows a Windows taskbar with various application icons and a system tray displaying the temperature (26°C), weather (Mostly cloudy), and the date and time (14:48, 26-09-2025).

❖ Validation Rule 2: Completion Percentage

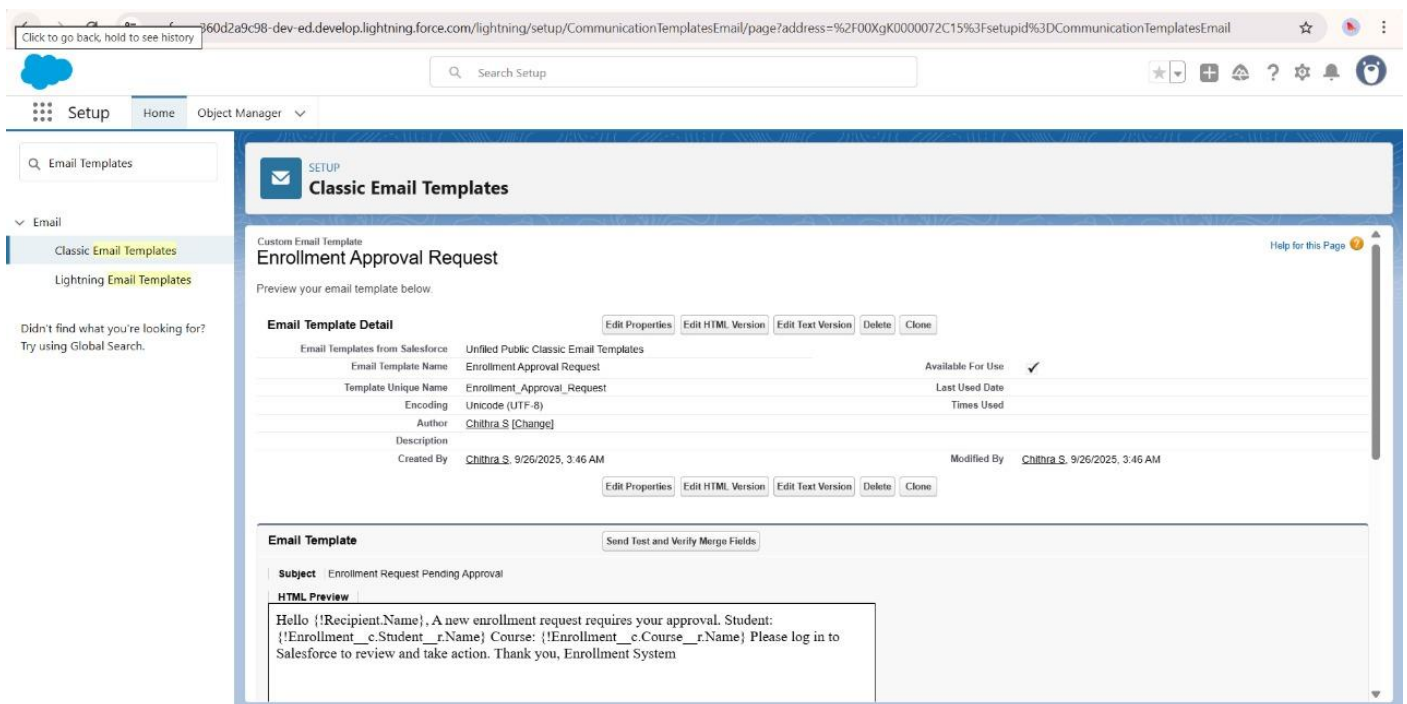
- **Purpose:** Ensure Completion % is between 0 and 100.

- **Rule Name:** Completion_Valid_Range
- **Error Condition Formula:**
- $\text{OR}(\text{Completion_c} < 0, \text{Completion_c} > 100)$
- **Error Message:** Completion must be between 0 and 100.
- **Error Location:** Field → Completion__c

Record-Triggered Flows

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

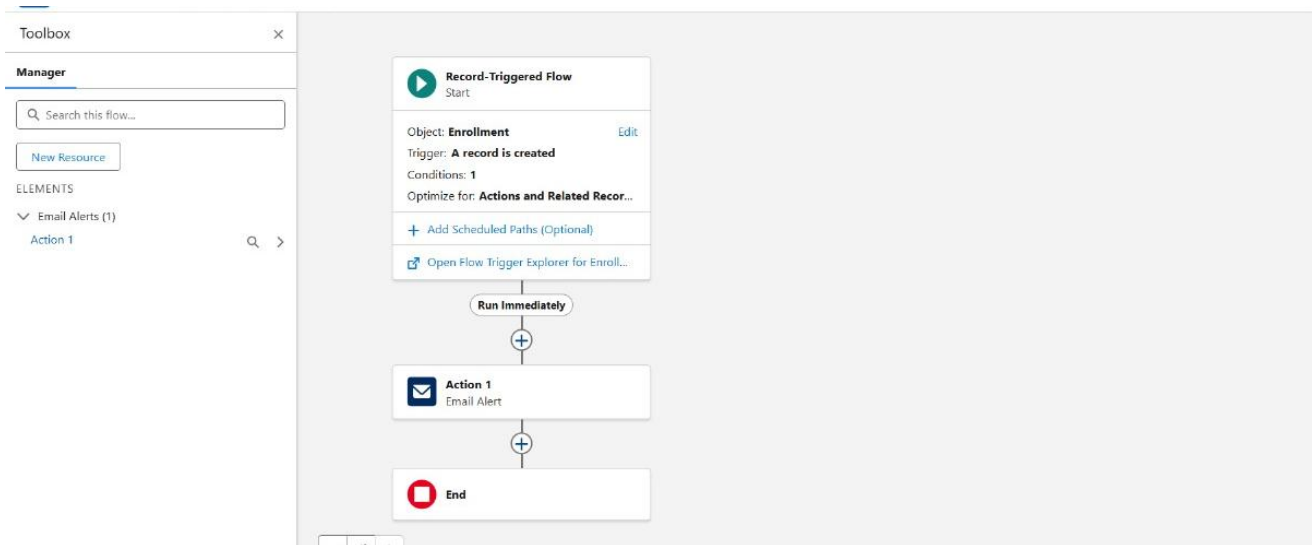
- Setup → Flow → New Flow → Record-Triggered Flow
- **Object:** Submission__c
- **Trigger:** Record Created (Before Save)
- **Logic:**
 - Get Assignment Due_Date__c
 - If Submission_Date__c ≤ Due_Date__c → Status = OnTime
 - Else → Status = Late



❖ 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

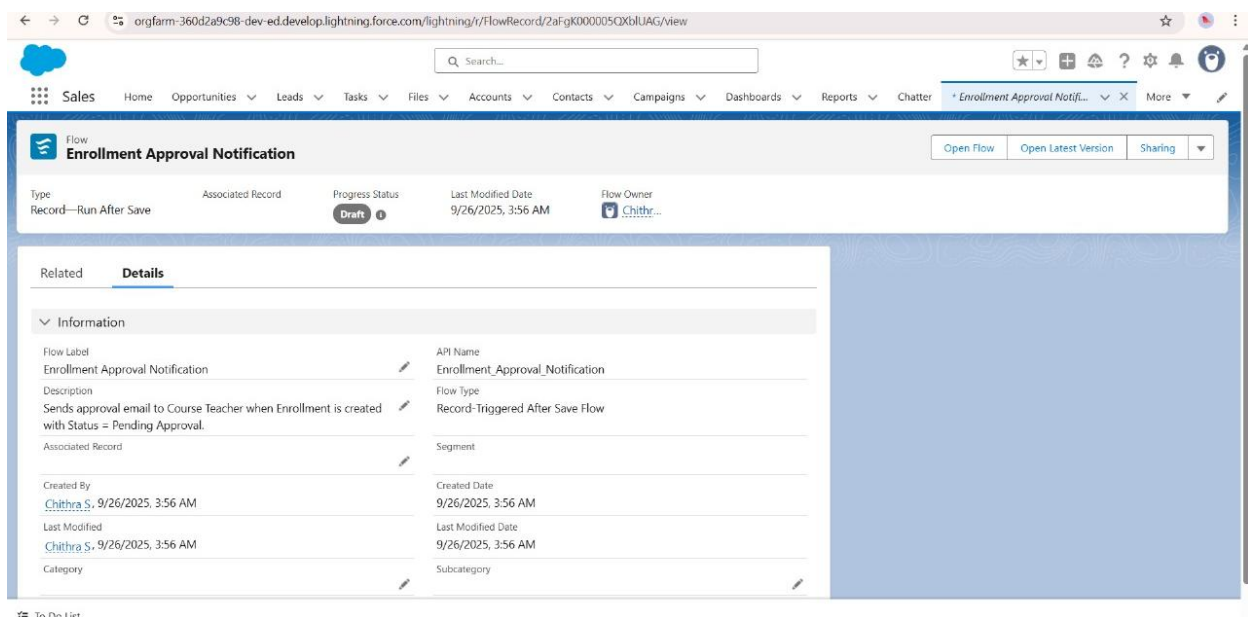
- **Setup** → **Approval Processes** → **New** → **Standard Wizard**
- **Object:** Enrollment__c
- **Process Name:** Enrollment_Approval

- **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

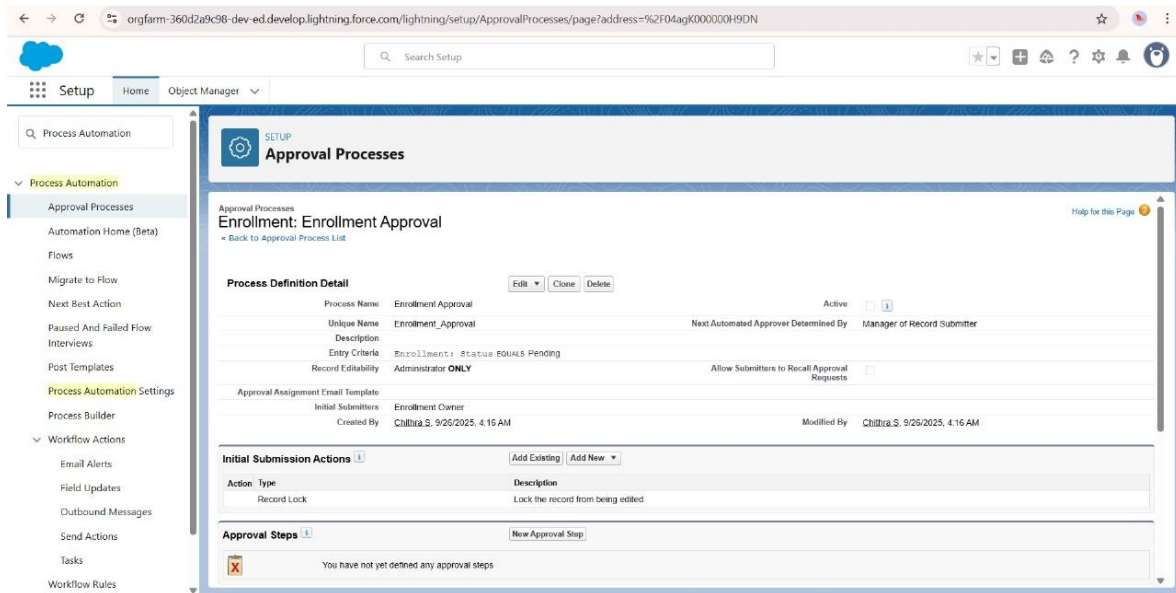
- **Record-Triggered Flow on Submission__c (After Save)**
- **Condition:** Status__c = Late
- **Action:** Create Task for Teacher
 - Subject: Review Late Submission
 - WhoId: Student__c
 - OwnerId: Assignment__r.OwnerId



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