

Student Attendance & Performance Tracker

Phase 4: Process Automation (Admin)

Introduction

Phase 4 focuses on implementing Salesforce administrative automation to reduce manual effort, enforce academic rules, and ensure timely communication within the **Student Attendance & Performance Tracker**.

Automation ensures data accuracy, proactive alerts, and streamlined academic workflows.

4.1 Validation Rules

Use Case Explanation

Validation Rules were implemented to ensure only accurate and meaningful academic data is saved in the system. These rules prevent incorrect entries that could affect reports, alerts, and decision-making.

Validation Rules Implemented

- Prevent attendance date from being a future date
- Make Attendance Status mandatory
- Restrict exam scores to allowed ranges (e.g., 0–100)
- Prevent negative absence counts

These validations maintain data integrity and consistency.

SETUP > OBJECT MANAGER

Attendance

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Validation Rules

2 Items. Sorted by Rule Name

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY	
Attendance_Date_Not_Future	Attendance Date	Attendance date cannot be in the future.	✓	Siri varshini Pentakota, 13/12/2025, 12:07 pm	▼
Attendance_Status_Required	Status	Please select attendance status.	✓	Siri varshini Pentakota, 13/12/2025, 12:08 pm	▼

Attendance

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Attendance Validation Rule

[Help for this Page](#) ?

[Back to Attendance](#)

Validation Rule Detail

[Edit](#) [Clone](#)

Rule Name	Attendance_Date_Not_Future	Active	<input checked="" type="checkbox"/>
Error Condition Formula	Attendance_Date__c > TODAY()		
Error Message	Attendance date cannot be in the future.	Error Location	Attendance Date
Description			
Created By	Siri varshini Pentakota, 13/12/2025, 12:07 pm	Modified By	Siri varshini Pentakota, 13/12/2025, 12:07 pm

[Edit](#) [Clone](#)

Attendance

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Attendance Validation Rule

[Back to Attendance](#)

Validation Rule Detail

[Edit](#) [Clone](#)

Rule Name	Attendance_Status_Required	Active	<input checked="" type="checkbox"/>
Error Condition Formula	ISBLANK(TEXT(Status__c))		
Error Message	Please select attendance status.	Error Location	Status
Description			
Created By	Siri varshini Pentakota, 13/12/2025, 12:08 pm	Modified By	Siri varshini Pentakota, 13/12/2025, 12:08 pm

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Result

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Result Validation Rule

[Back to Result](#)

Validation Rule Detail

[Edit](#) [Clone](#)

Rule Name	Result_Score_Range	Active	<input checked="" type="checkbox"/>
Error Condition Formula	OR(Score__c < 0, Score__c > 100)		
Error Message	Score must be between 0 and 100.	Error Location	Score
Description			
Created By	Siri varshini Pentakota, 13/12/2025, 12:09 pm	Modified By	Siri varshini Pentakota, 13/12/2025, 12:09 pm

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4.2 Workflow Rules

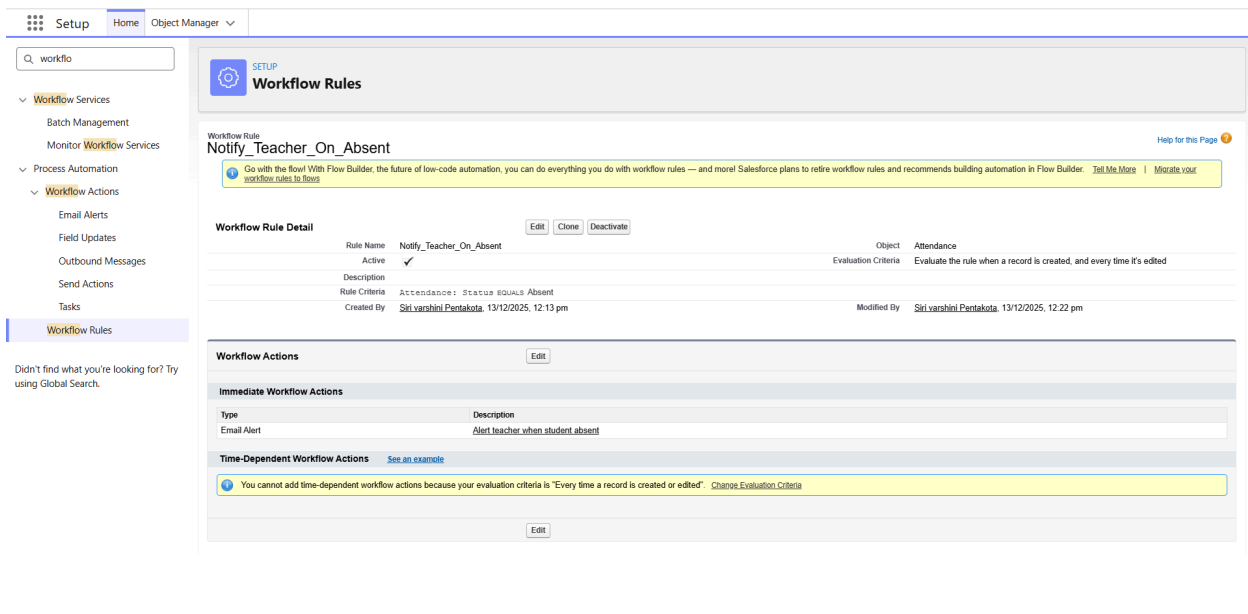
Use Case Explanation

Workflow Rules were used to automate internal communication without manual follow-ups.

Use Case Implemented

- When a student is marked **Absent**, an automatic email alert is sent to the assigned teacher

This ensures faculty awareness and quick action.



4.3 Process Builder

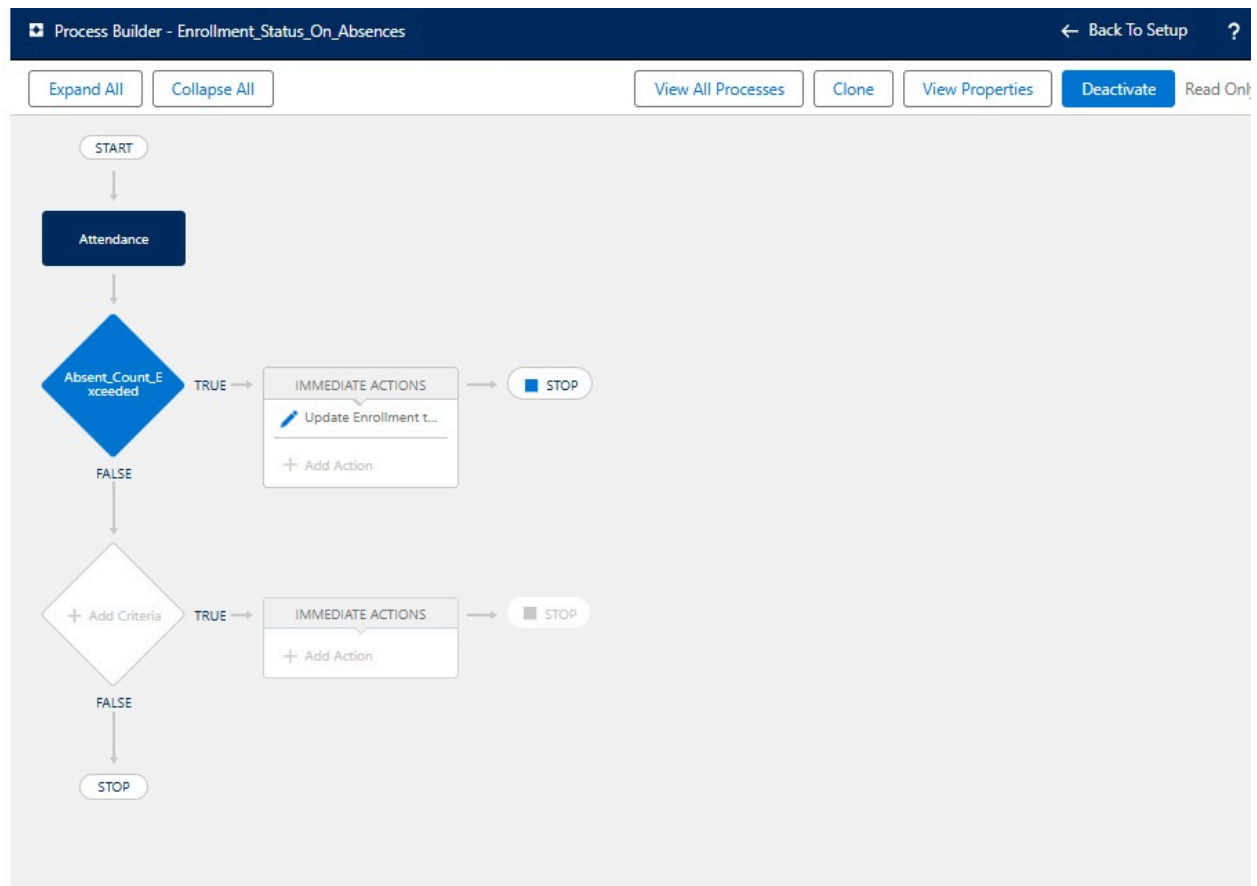
Use Case Explanation

Process Builder was used to automate field updates based on attendance trends.

Use Case Implemented

- If the number of absences exceeds a predefined limit:
 - Enrollment Status is updated to **“Warning”**

This helps identify students with attendance issues early.



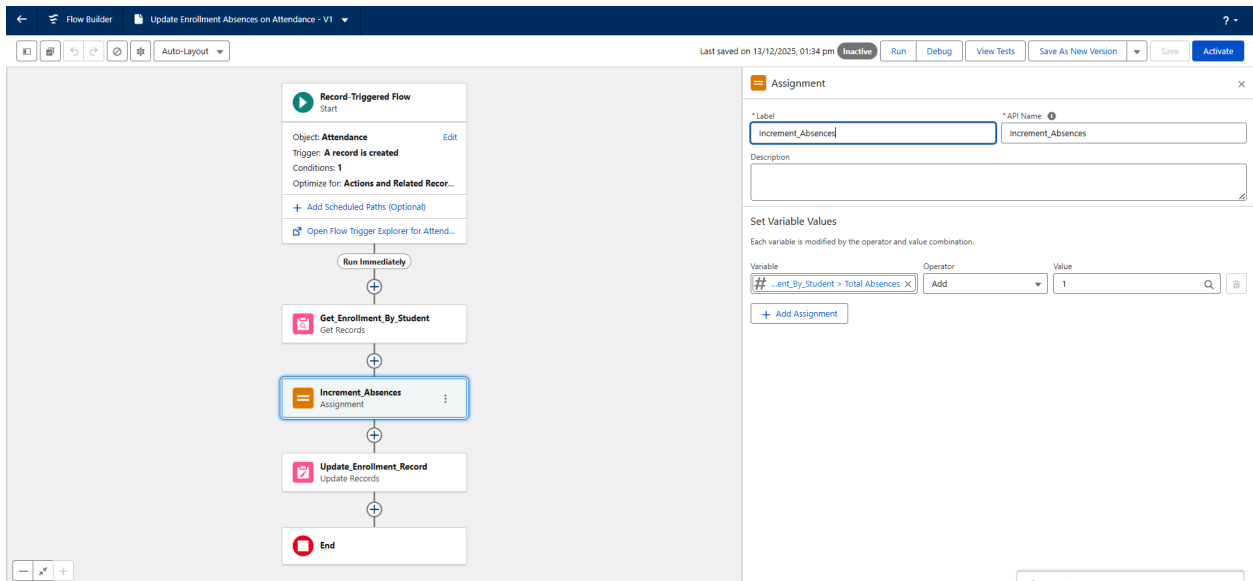
4.4 Approval Process


- Approval processes were created to formalize special cases. For example, makeup exam requests require administrative approval before scheduling. This ensures that exceptions are reviewed properly.

4.5 Flow Builder

Use Case Explanation

Flow Builder was used for advanced and flexible automation beyond workflow and process builder capabilities.





SETUP

Flows

Flow

Update Enrollment Absences on Attendance

Help for this Page

« Back to List: Flows

Flow Detail

EditOpenRunDelete

Flow Label

Update Enrollment Absences on Attendance

Description

Flow API Name

Update_Enrollment_Absences_on_Attendance

Namespace Prefix

Environments

Default

Type

Autolaunched Flow

Active Version

URL

/flow/Update_Enrollment_Absences_on_Attendance

Trigger

Record—Run After Save

Activated/Deactivated By

Modified By

Siri varshini Pentakota

Created By

Siri varshini Pentakota

13/12/2025, 1:34 pm

13/12/2025, 1:34 pm

Flow Versions

Action	Flow Label	Version	Description	Built with	Created Date	Type	Status	Progress Status	Run in Mode	API Version for Running the Flow	Log Metrics to Data Cloud
Open Run Activate	Update Enrollment Absences on Attendance	1		Flow Builder	13/12/2025, 1:34 pm	Autolaunched Flow	Inactive	Draft	Default Mode	65.0	<input type="checkbox"/>

4.6 Email Alerts

Use Case Explanation

Email Alerts were configured to notify stakeholders about attendance and academic events.

Use Cases Implemented

- Parents receive alerts for student absences
- Faculty notified for repeated absences
- Admin notified for approval requests

This improves transparency and timely intervention.

SETUP

Email Alerts

All Email Alerts

Help for this Page

Email alerts are used to send emails from a flow or other automation.

View: All Email Alerts

Create New View

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Other | All

New Email Alert

Action	Description	Email Template Name	Object	Last Modified Date
Edit Del	Alert teacher when student absent	Absent_Notification_Template	Attendance	13/12/2025
Edit Del	Parent_Absent_EmailAlert	Absent_Notification_Template	Attendance	13/12/2025

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Other | All

SETUP

Email Alerts

Email Alert

Alert teacher when student absent

Rules Using This Email Alert

 |

Approval Processes Using This Email Alert

 |

Entitlement Processes Using This Email Alert

Email Alert Detail

Description

Alert teacher when student absent

Unique Name

Alert_teacher_when_student_absent

From Email Address

Current User's email address

Recipients

User_Teacher_Teacher

Additional Emails

Email Template

Absent_Notification_Template

Object

Attendance

Created By

Siri varshini Pentakota, 13/12/2025, 12:22 pm

Modified By

Siri varshini Pentakota, 13/12/2025, 12:22 pm

Edit

Delete

Clone

SETUP

Email Alerts

Email Alert

Parent_Absent_EmailAlert

Rules Using This Email Alert

 |

Approval Processes Using This Email Alert

 |

Entitlement Processes Using This Email Alert

Email Alert Detail

Description

Parent_Absent_EmailAlert

Unique Name

Parent_Absent_EmailAlert

From Email Address

Current User's email address

Recipients

User_Teacher_Teacher
User_Parent

Additional Emails

Email Template

Absent_Notification_Template

Object

Attendance

Created By

Siri varshini Pentakota, 13/12/2025, 1:38 pm

Modified By

Siri varshini Pentakota, 13/12/2025, 1:38 pm

Edit

Delete

Clone

4.7 Field Updates

Use Case Explanation

Field Updates automate data changes without manual intervention.

Use Cases Implemented

- Automatically update Enrollment Status to **Warning**

- Update attendance summary fields

Conclusion

Phase 4 successfully automates critical academic workflows using Salesforce admin tools.

Validation rules ensure data accuracy, flows enable proactive monitoring, approvals formalize exceptions, and notifications keep stakeholders informed—resulting in a reliable, efficient, and scalable academic CRM system.