Phase 4: Process Automation (Admin)

Introduction

Process automation in Salesforce plays a crucial role in reducing manual work, ensuring data accuracy, and delivering proactive alerts to stakeholders. In the academic context, automation ensures that student performance, attendance, and risk detection are consistently monitored. Phase 4 focuses on implementing **Validation Rules, Flows, Approval Processes, and Notifications** to build an intelligent academic tracking system.

The goal is to:

- Enforce data quality.
- Automatically identify at-risk students.
- Streamline faculty approval workflows.
- Ensure timely interventions with tasks and reminders.

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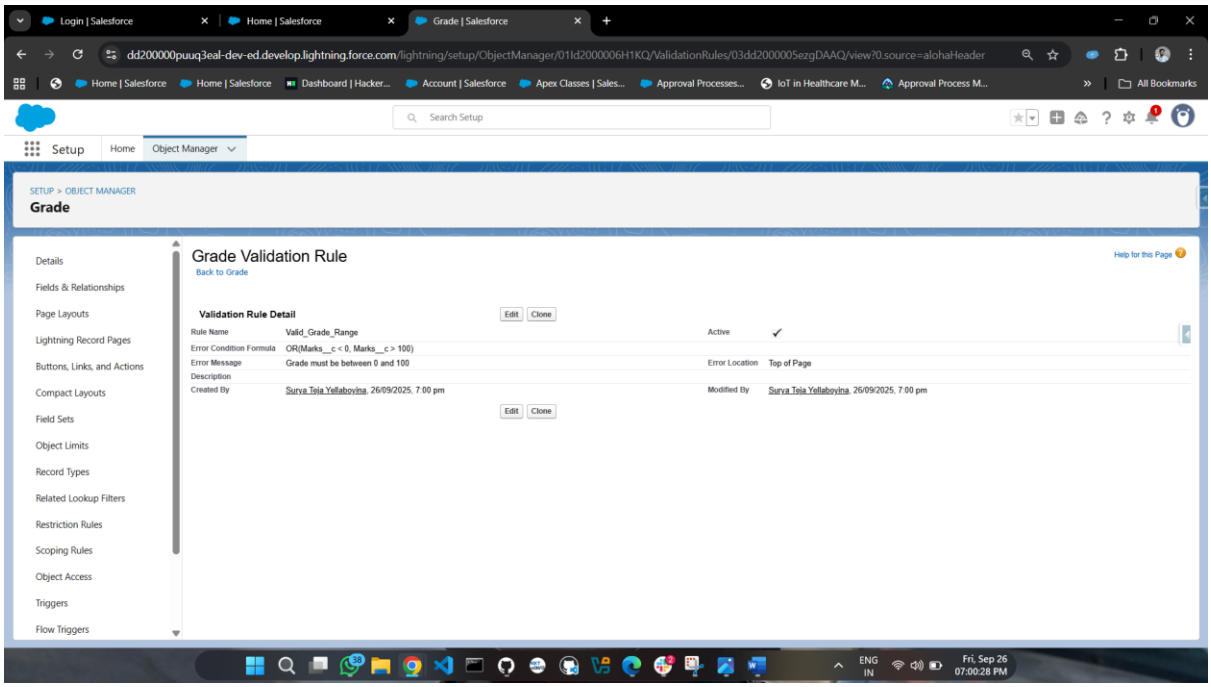
1. Validation Rules

Background

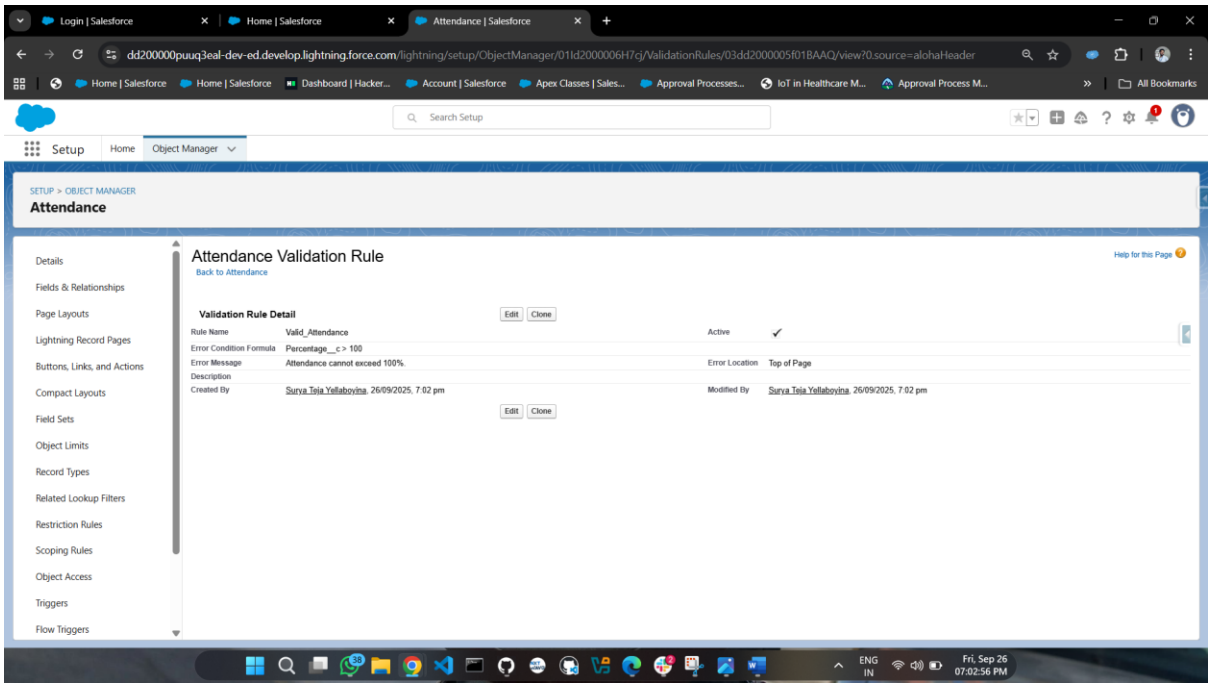
Validation Rules are logical expressions that check the accuracy of data entered into Salesforce records. If the condition evaluates to “true,” the system prevents the record from being saved and displays an error message.

Use Case in Education Model

- **Grades**: Students should only be assigned grades between 0 and 100. Any entry outside this range is invalid.



- **Attendance**: Attendance percentage cannot exceed 100%.



Impact

- Eliminates incorrect or illogical data entries.
- Ensures reporting and analytics are always based on clean, accurate data.
- Reduces errors caused by manual data entry.

Example

If a faculty member tries to enter a grade of 105, the system immediately blocks the entry and shows an error message: *"Grade must be between 0 and 100."*

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2. Flows for Risk Detection

Background

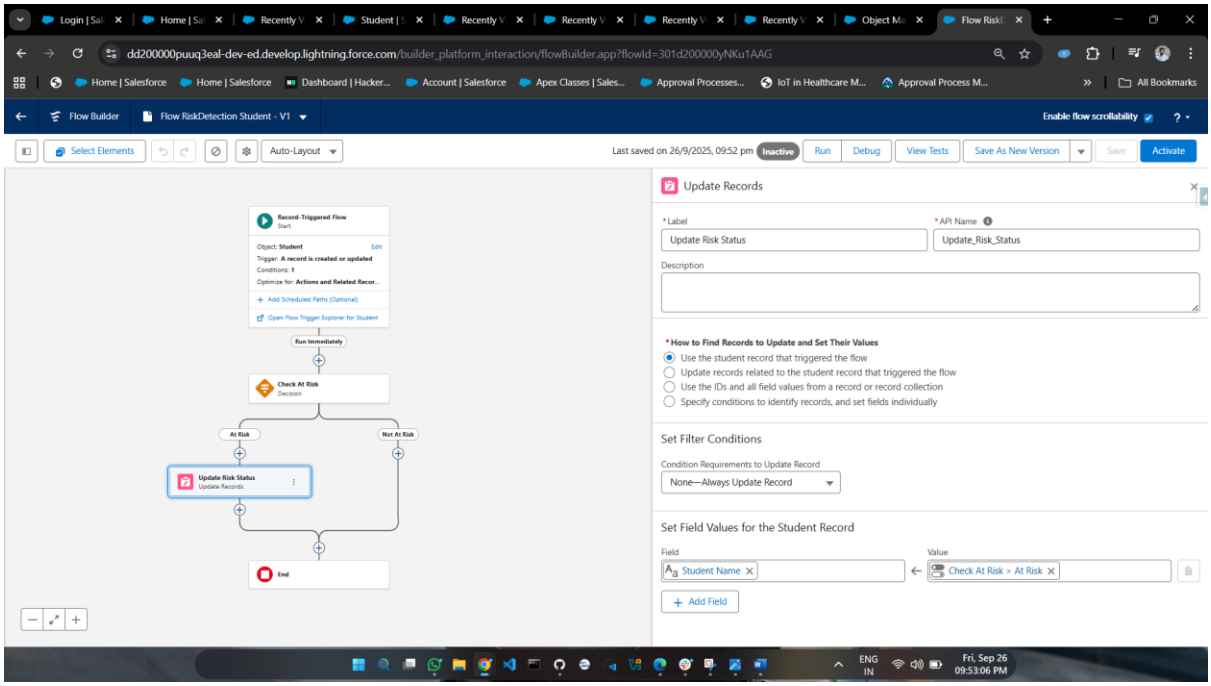
Flows in Salesforce provide **declarative (no-code) automation** to evaluate conditions and trigger actions such as record updates, emails, tasks, or notifications.

Use Case in Education Model

- If a student's **GPA < 6** OR **Attendance < 60%**, the system automatically classifies the student as **"At Risk."**
- Automated actions:
    - Update student's **Risk_Status field**.
    - Notify student and advisor via email or SMS.

Impact

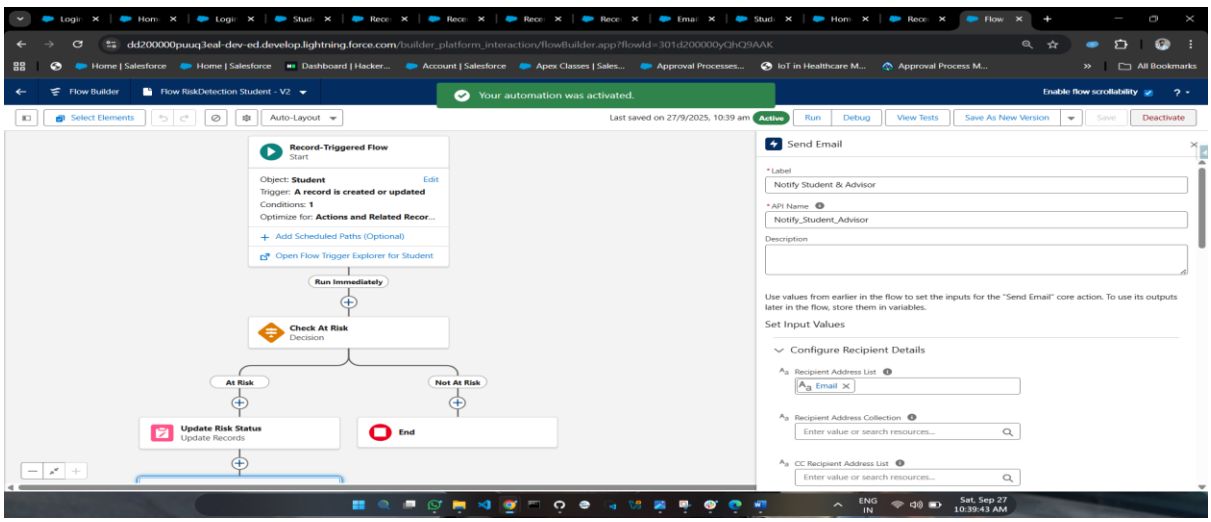
- Enables early identification of struggling students.
- Reduces the chance of academic failure going unnoticed.
- Empowers advisors to take proactive steps such as counselling or additional mentoring.



Example

When a student's GPA drops to 5.5, the system updates their record to **"At Risk"** and immediately sends an email:

- To the **student** → "You have been identified as at risk. Please schedule a counselling session."
- To the **advisor** → "Your student has been flagged as at risk. Please review their performance."



3. Approval Processes for Grade Re-evaluation

Background

Approval Processes in Salesforce allow organizations to enforce structured review workflows. Requests pass through one or more approvers, ensuring accountability and transparency.

Use Case in Education Model

- Students may request a **grade re-evaluation** if they believe their marks were not calculated correctly.
- Approval process routes the request to the assigned faculty member.

Flow of Events

1. Student submits request (e.g., checkbox field *Request_Reevaluation = TRUE*).
2. Faculty member receives approval request.
3. Faculty reviews → Approves or Rejects.
4. Status updated accordingly: "Re-evaluation Approved" or "Re-evaluation Rejected."
5. Student automatically notified of outcome.

Impact

- Standardizes academic dispute resolution.
- Reduces manual follow-ups and miscommunication.
- Ensures fair and transparent handling of grade concerns.

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4. Tasks and Notifications

Background

Automated tasks and notifications ensure that important actions are not overlooked. They provide reminders and ensure collaboration between faculty and students.

Use Case in Education Model

When a student is flagged as **At Risk**:

- **Faculty Task** → A task is automatically created with subject "Meet Student."
- **Student Notification** → The student receives an email or SMS: "Please schedule a counselling session."

Impact

- Faculty are reminded to follow up with at-risk students.
- Students are actively engaged in corrective actions.

- Encourages collaboration between faculty, advisors, and students.

Benefits of Phase 4 Implementation

1. **Data Accuracy** → Validation rules eliminate invalid entries.
2. **Proactive Risk Management** → Flows detect and flag struggling students automatically.
3. **Transparency** → Approval processes ensure academic fairness in grade-related issues.
4. **Stakeholder Engagement** → Automated tasks and notifications ensure timely intervention.
5. **Efficiency** → Reduces manual monitoring, freeing faculty and advisors to focus on support rather than administration.

Conclusion

Phase 4 integrates **process automation** into the education data model. With a combination of validation rules, flows, approval processes, and notifications, the system becomes proactive and intelligent.

This not only improves the accuracy of academic records but also enhances the student experience by ensuring timely support and transparent processes. By automating repetitive tasks, administrators and faculty gain more time to focus on meaningful academic guidance, ultimately contributing to improved student success.