

Phase 4 Report

Process Automation

Project: Smart Healthcare Appointment & Compliance Hub

Batch: 4

Program: TCS Last Mile SmartBridge

Prepared by: Palla Bhugarbha

1. Introduction

Phase 4 focuses on automating key business processes in the Smart Healthcare Appointment & Compliance Hub using Salesforce's Process Automation tools. This phase enhances efficiency by reducing manual work, ensuring timely notifications, enforcing approvals, and maintaining data accuracy across appointments. By leveraging validation rules, flows, and approval processes, the system can proactively manage appointments and compliance-related tasks

2. Objectives

- Implement **Validation Rules** to maintain data integrity (e.g., ensuring appointment end time is after start time).
- Configure **Record-Triggered Flows** and **Scheduled Flows** for automated notifications and reminders.
- Set up **Approval Processes** for critical appointment changes like rescheduling.
- Design **Workflow Rules, Process Builder, and Email Alerts** to streamline communication with patients and staff.
- Enable **Custom Notifications and Tasks** to keep users informed and engaged in real-time.

3. Steps Performed

3.1 Validation Rule

- Ensured **appointment end time is always after start time** to maintain scheduling accuracy.
- Prevented incorrect or incomplete data entry by enforcing rules at the record level.
- Improved overall **data integrity** and reduced manual error correction for appointments.

orgfarm-9c399a4996-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/011gL000002K8ZL/ValidationRules/view

Setup Home Object Manager

SETUP > OBJECT MANAGER

Appointment

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Restriction Rules

Scoping Rules

Object Access

Triggers

Validation Rules

1 Items, Sorted by Rule Name

New

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
EndTime_After_StartTime	End DateTime	End date/time must be after start date/time.	✓	Palla Bhugarbha, 9/25/2025, 9:13 AM

orgfarm-9c399a4996-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/011gL000002K8ZL/ValidationRules/03dGL000000WP6XQAW/view

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Appointment Validation Rule

Back to Appointment

Help for this Page

Validation Rule Detail

Rule Name: EndTime_After_StartTime [Edit] [Clone] Active: ✓

Error Condition Formula: AND(NOT(ISBLANK(Start_DateTime__c)), NOT(ISBLANK(End_DateTime__c)), End_DateTime__c <= Start_DateTime__c)

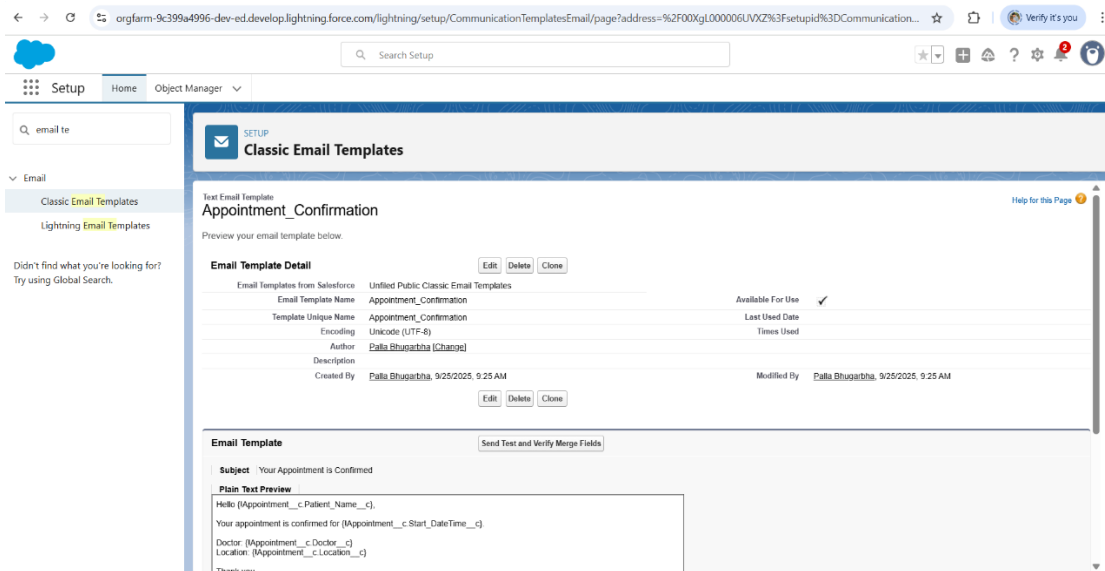
Error Message: End date/time must be after start date/time. Error Location: End DateTime

Description:

Created By: Palla Bhugarbha, 9/25/2025, 9:13 AM [Edit] [Clone] Modified By: Palla Bhugarbha, 9/25/2025, 9:13 AM

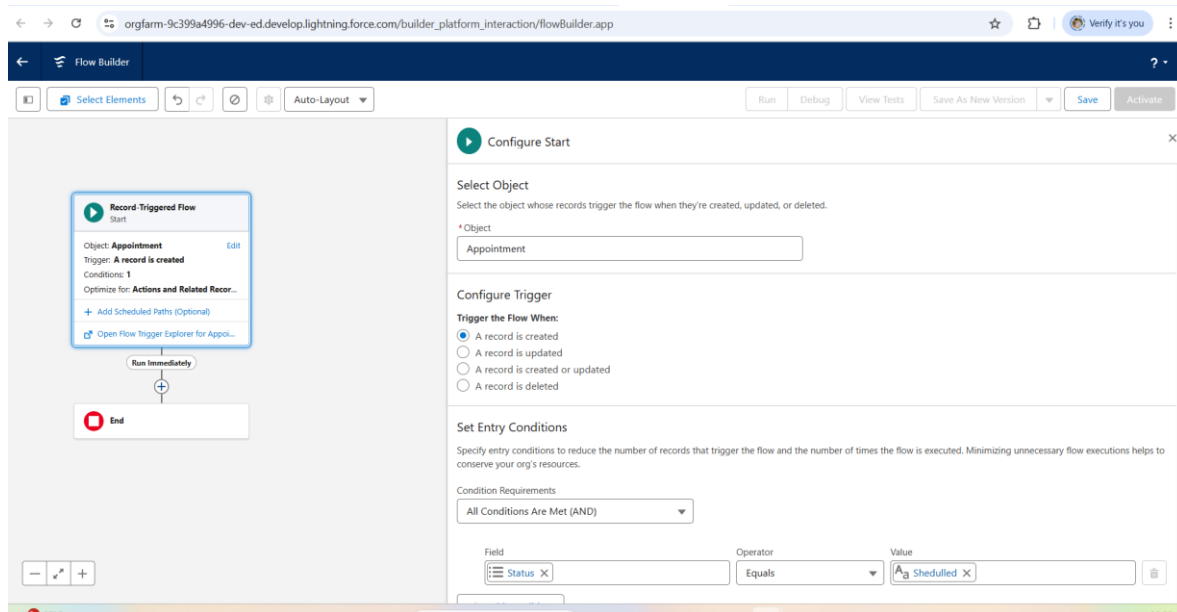
3.2 Record Trigger Flow

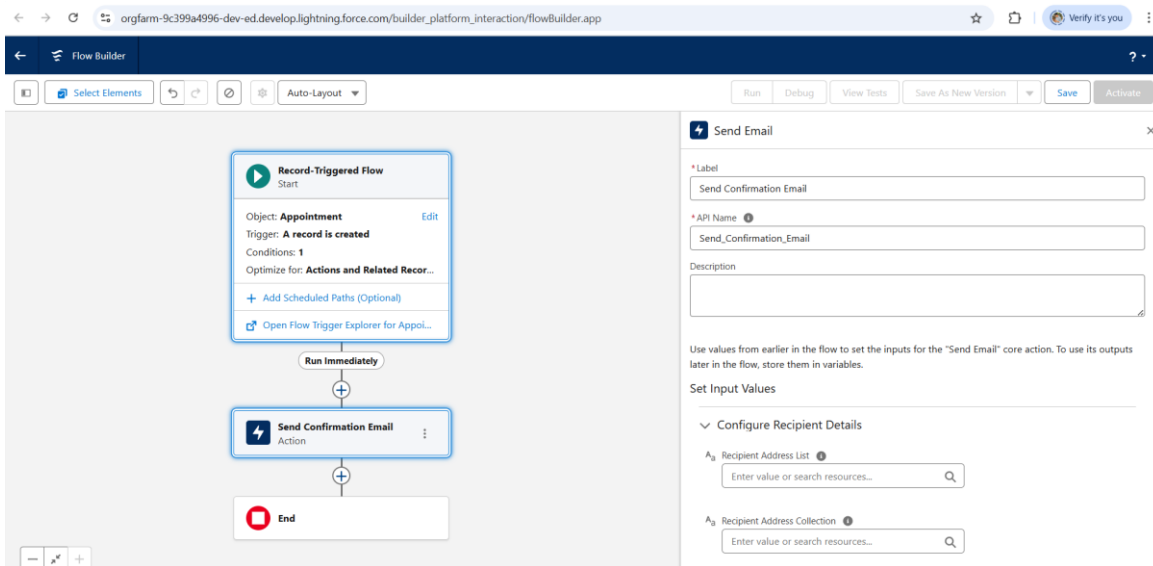
- Automated sending of **confirmation emails** to patients when appointments are scheduled.
- Used **entry criteria** (Status = Scheduled) to ensure only relevant records trigger notifications.
- Reduced manual follow-up and ensured patients receive timely appointment details.



3.3 Sheduled Flow

- Created **approval workflow** for critical appointment reschedules to maintain oversight.
- Configured **entry criteria** (Reschedule Requested = True, Priority = Critical) to trigger approval only when necessary.
- Enabled managers to **approve/reject requests**, updating the record status and notifying the patient.





3.4 Task or Custom Notification

- Automating **daily reminder emails** to patients (and optionally doctors) for next-day appointments.
- Creating a **formula resource (TomorrowDate)** and looped over records to send reminders efficiently.
- Reduced missed appointments and improved patient compliance with scheduled care for future purpose.

The screenshot shows the Salesforce Setup page for 'Approval Processes'. The main heading is 'Approval Processes'. Below it, the specific process is 'Appointment: Appt_Reschedule_Approval'. The 'Process Definition Detail' section includes the following information:

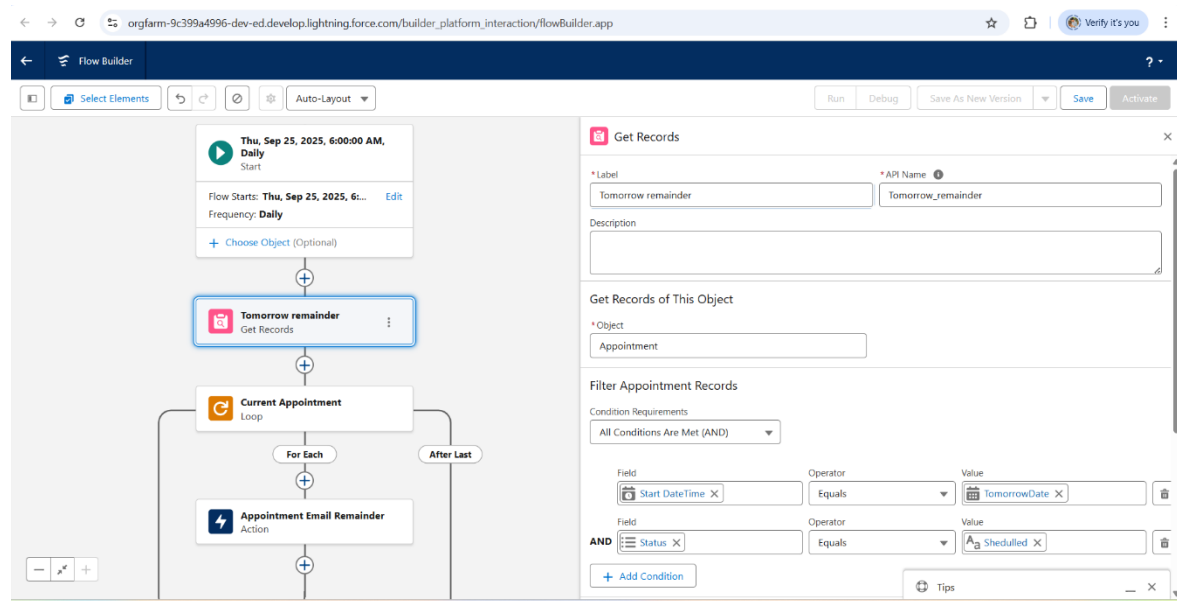
Field	Value
Process Name	Appt_Reschedule_Approval
Unique Name	Appt_Reschedule_Approval
Description	
Entry Criteria	Reschedule_Requested__c = True
Record Editability	Administrator ONLY
Approval Assignment Email Template	Appointment_Confirmation
Initial Submitters	Appointment Owner, User: Palla Bhugarbha, User: patient.1
Created By	Palla Bhugarbha, 9/25/2025, 10:30 AM
Modified By	Palla Bhugarbha, 9/25/2025, 10:30 AM

The 'Initial Submission Actions' section shows a table with columns for Action, Type, and Description:

Action	Type	Description
Record Lock		Lock the record from being edited

The 'Approval Steps' section shows a table with columns for Step Name and Description:

Step Name	Description
New Approval Step	



4. Expected Outcomes

- Reduced manual follow-up and administrative overhead through automated reminders.
- Improved accuracy and compliance of appointment scheduling with validation rules.
- Faster decision-making and oversight for critical appointment changes via approvals.
- Enhanced patient and staff satisfaction due to timely notifications and communication.

5. Conclusion

Phase 4 ensures that the Smart Healthcare Appointment & Compliance Hub operates efficiently and reliably. Automation of reminders, approvals, and notifications not only saves time but also strengthens compliance and improves the overall patient experience, providing a robust foundation for future system enhancements.