

PHASE 4 — BUSINESS LOGIC & AUTOMATION

Goal of Phase 4:

Add *intelligence* to the system so users **cannot make wrong entries** and **processes become automatic**.

WHY PHASE 4 IS IMPORTANT

Right now:

- Users can technically enter **wrong appointments**
- Doctor availability doesn't auto-control bookings
- Status changes are manual and error-prone

 Phase 4 fixes all of this using Salesforce logic

PHASE 4 — MODULE BREAKDOWN

Step	Feature
4.1	Validation Rules
4.2	Appointment Status Control
4.3	Doctor Availability Automation
4.4	Optional Email Alerts
4.5	Final Testing

STEP 4.1 — VALIDATION RULES (Mandatory)

Purpose

Prevent **invalid appointments** from being created.

Validation Rule 1

No Appointment in the Past

Object

Appointment

Logic

Appointment Date + Time **must be future**

Formula

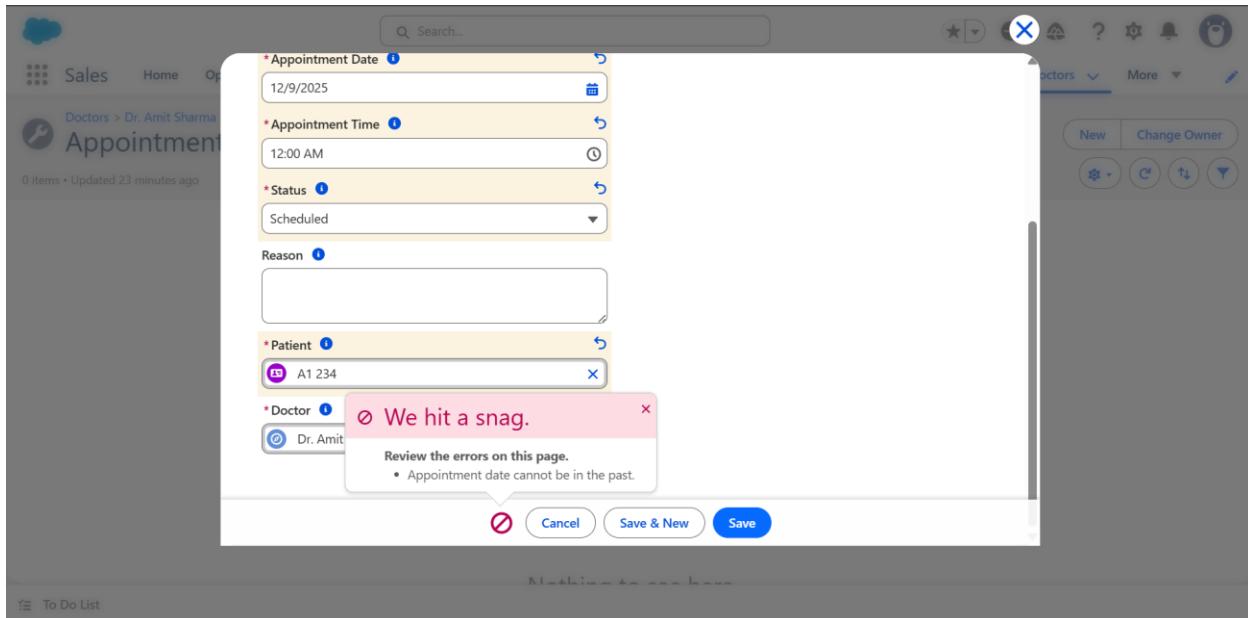
Appointment_Date__c < TODAY()

Error Message

Appointment date cannot be in the past.

Error Location

Field: **Appointment Date**



🔒 Validation Rule 2

✗ Prevent Booking if Doctor is Unavailable

⌚ Object

Appointment

🧠 Logic

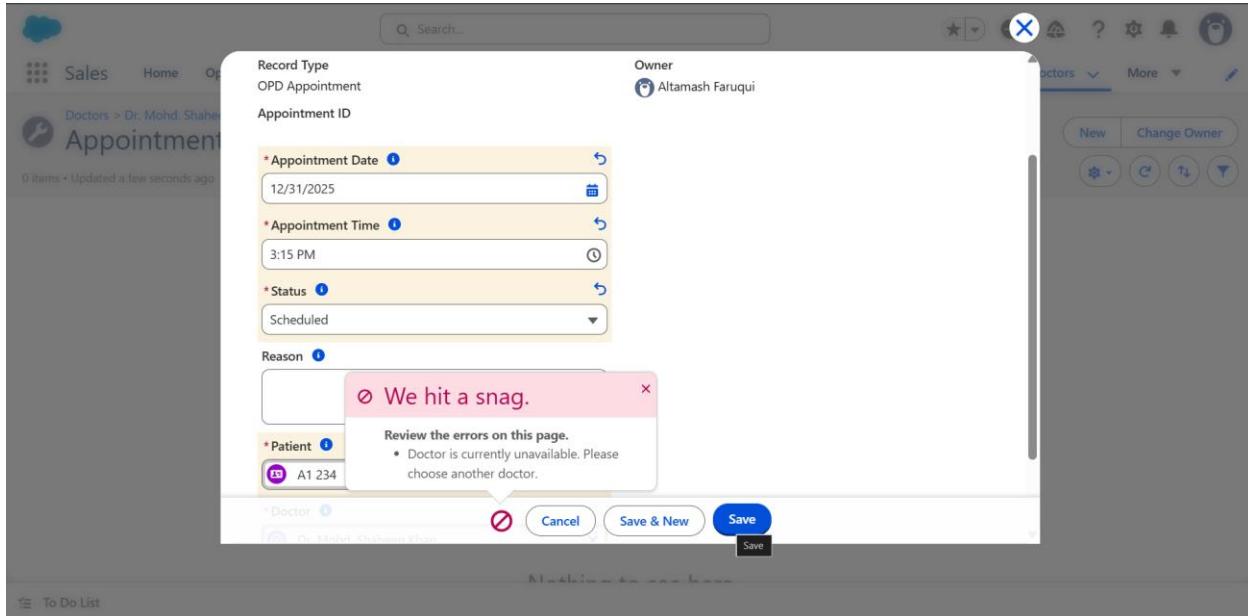
If linked Doctor's Availability Status = Unavailable → block booking

📋 Formula

```
Doctor__r.Availability_Status__c = "Unavailable"
```

Error Message

Doctor is currently unavailable. Please choose another doctor.



Validation Rule 3

Emergency Appointments Must Have Reason

Object

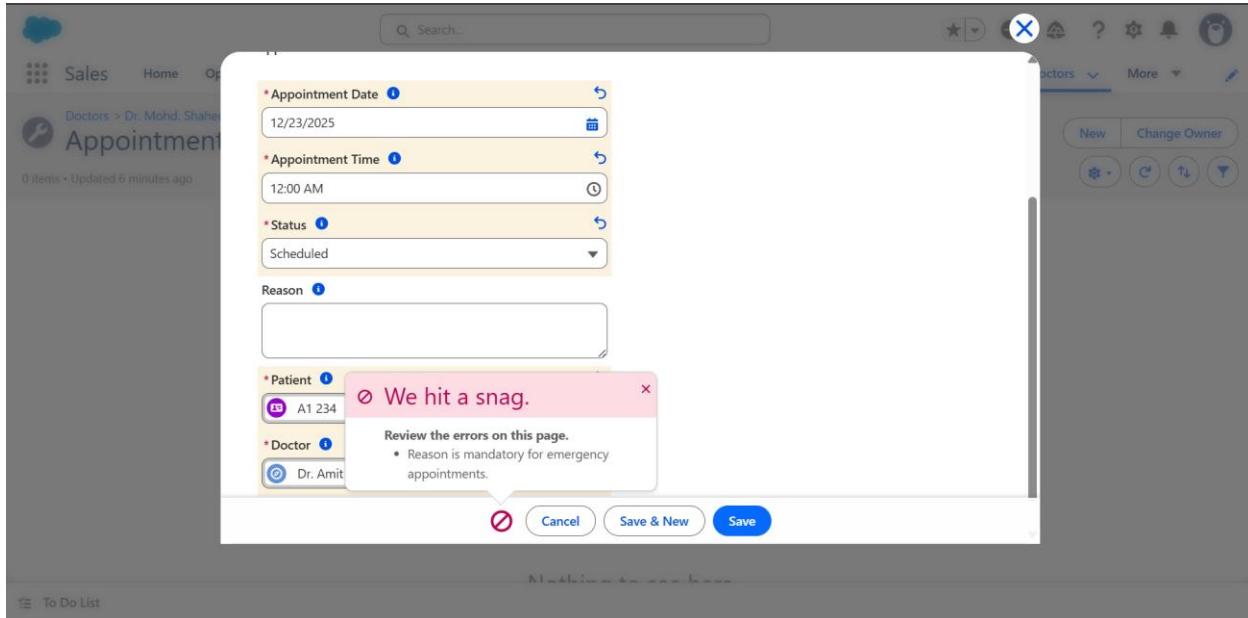
Appointment

Formula

```
AND(  
ISPICKVAL(RecordType.Name , "Emergency Appointment"),  
ISBLANK(Reason__c)  
)
```

Error Message

Reason is mandatory for emergency appointments.



STEP 4.2 — STATUS CONTROL (Business Rule)

Appointment Status Values

Status

Scheduled
Completed
Cancelled

Rule: Completed Appointment Cannot Be Edited

Object

Appointment

Formula

ISPICKVAL(Status__c , "Completed")

Error Message

Completed appointments cannot be modified.

STEP 4.3 — AUTOMATION (FLOW)

Goal

Automatically update **Doctor Availability**

Automation Logic

Event	Doctor Availability
Appointment Created	Unavailable
Appointment Completed	Available
Appointment Cancelled	Available

Tool Used

Record-Triggered Flow

Flow Type

After Save

Object

Appointment

Flow Conditions

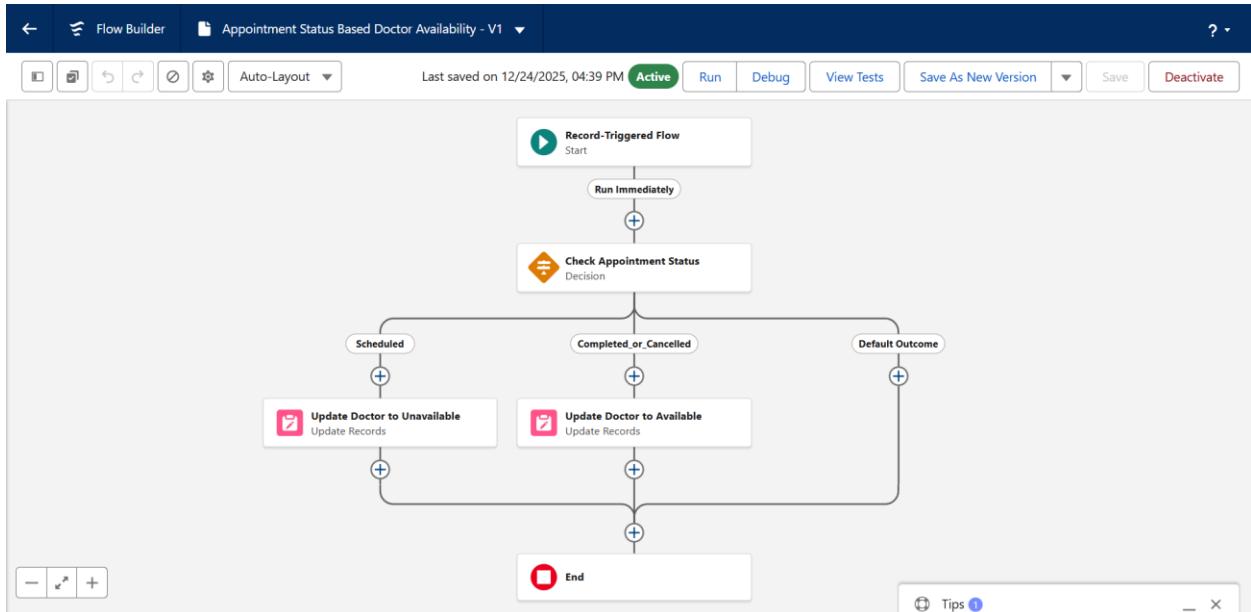
Status = Scheduled

→ Update Doctor.Availability_Status = Unavailable

Status = Completed OR Cancelled

→ Update Doctor.Availability_Status = Available

📌 This makes your project “REAL-WORLD READY”



✉ STEP 4.4 — EMAIL ALERT (Optional but Professional)

Trigger

When Emergency Appointment is created

Recipient

Hospital Manager

Email Content

Emergency appointment created. Immediate attention required.

📌 Use Email Alert + Flow

The screenshot shows the Salesforce Setup interface with the following details:

Search Bar: Search Setup

Header: Setup (selected), Home, Object Manager

Left Navigation: Process Automation, Workflow Actions, Email Alerts (selected)

Current Page: SETUP / Email Alerts

Email Alert Detail:

- Description: Alert hospital manager for emergency appointment
- Unique Name: Alert_hospital_manager_for_emergency_appointment
- From Email Address: Current User's email address
- Recipients: User_Hospital Manager
- Additional Emails: Altamash.Farouqi, 12/24/2025, 10:05 AM
- Created By: Altamash.Farouqi, 12/24/2025, 10:05 AM
- Modified By: Altamash.Farouqi, 12/24/2025, 10:05 AM

Buttons: Edit, Delete, Clone

Email Template: Emergency Appointment Alert

Email Object: Appointment

Help: Help for this Page

Related Sections:

- Rules Using This Email Alert:** This alert is currently not used by any rules.
- Approval Processes Using This Email Alert:** This alert is currently not used by any approval processes.

STEP 4.5 — TESTING (Must Mention in PDF)

Test Case	Result
Past appointment	 Blocked
Unavailable doctor	 Blocked
Emergency without reason	 Blocked
Appointment completion	 Doctor becomes available