Phase 4: Process Automation (Declarative)

4.1 Validation Rules

1. No Past Date Appointments

- Object: Appointment
- Rule Name: No_Past_Date_Appointments
- Error Condition Formula: `Appointment_Date__c < TODAY()`
- Error Message: "Appointment date cannot be in the past"
- Error Location: Appointment_Date__c field

2. Doctor Availability Check

- Object: Appointment
- Rule Name: Check_Doctor_Working_Hours
- Error Condition Formula:

```
NOT(
  INCLUDES(Doctor__r.Available_Days__c,
    TEXT(CASE(WEEKDAY(Appointment_Date__c),
      1, "Sunday", 2, "Monday", 3, "Tuesday",
      4, "Wednesday", 5, "Thursday", 6, "Friday", 7, "Saturday", ""
    ))
  )
)
```

- Error Message: "Selected doctor is not available on this day"

3. Bill Amount Validation

- Object: Bill Information
- Rule Name: Paid_Amount_Cannot_Exceed_Total
- Error Condition Formula: `Amount_Paid__c > Total_Amount__c`
- Error Message: "Amount paid cannot exceed total bill amount"

4.2 Workflow Rules (Classic Workflow)

Appointment Confirmation Workflow

- Object: Appointment
- Rule Name: Send Appointment Confirmation

- Evaluation Criteria: Created, and every time it's edited
- Rule Criteria: `Status = "Scheduled" OR Status = "Confirmed"`
- Immediate Actions:
  - Email Alert: Send confirmation email to patient
  - Field Update: Set `Reminder_Sent__c = True`
  - Task Creation: Create follow-up task for admin staff

4.3 Process Builder Processes

1. New Patient Registration Process

- Process Name: New Patient Registration
- Object: Contact
- Start Process: When a record is created or edited
- Criteria: Record Type = "Active Patient" AND Is Changed = True
- Actions:
  - Create Task: Assigned to Administrative Staff, Subject: "Complete patient registration for [Patient Name]", Priority: High
  - Send Email: Template: Welcome to Clinic Email, To: Patient Email

2. Appointment Status Update Process

- Process Name: Appointment Status Updates
- Object: Appointment
- Criteria: `Status = "Completed" AND ISCHANGED(Status__c)`
- Actions:
  - Create Medical Case Record: Patient = [Appointment].Patient__c, Doctor = [Appointment].Doctor__c, Related Appointment = [Appointment].Id, Case Status = "Open", Case Date = TODAY()
  - Create Bill Information Record: Patient = [Appointment].Patient__c, Related Appointment = [Appointment].Id, Doctor = [Appointment].Doctor__c, Consultation Fee = [Appointment].Doctor__r.Consultation_Fee__c, Bill Date = TODAY(), Payment Status = "Pending"

4.4 Flow Builder Implementation

1. Appointment Booking Flow

- Flow Type: Screen Flow
- Flow Name: Patient Appointment Booking
- Screens & Components:

1. Patient Selection: Lookup (Object: Contact, Filter: Record Type = "Active Patient", Required: Yes, Store in Variable: `selectedPatient`)
2. Doctor & Date Selection: Picklist (Doctor Selection → `selectedDoctor`), Date Input (appointmentDate, must be future), Time Input (appointmentTime)
3. Appointment Details: Picklist (Appointment Type), Text Area (Reason for Visit, Additional Notes)

- Flow Logic:
  o Decision Element: Check Doctor Availability
  o Create Records: Create Appointment Record
  o Email Alert: Send confirmation email
  o Screen: Display confirmation message

2. Patient Check-in Flow

- Flow Type: Screen Flow
- Flow Name: Patient Check-in Process
- Trigger: When patient arrives for appointment
- Screens & Components:
  1. Search Patient: Lookup to find today's appointments (Filter: Appointment Date = TODAY() AND Status = "Scheduled")
  2. Update Appointment Status: Automatically update Status → "In Progress", Create arrival timestamp

Validation Rule sceenshot

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Appointment_Type ↺

Regular Consultation ▾

Status ↺

In Progress ▾

Reason for Visit

Notes

Reminder Sent
☐

Created Via

--None--

⊘ **We hit a snag.** ⊠

**Review the errors on this page.**
- this not doctor valid appointment time

⊘ Cancel Save & New **Save**