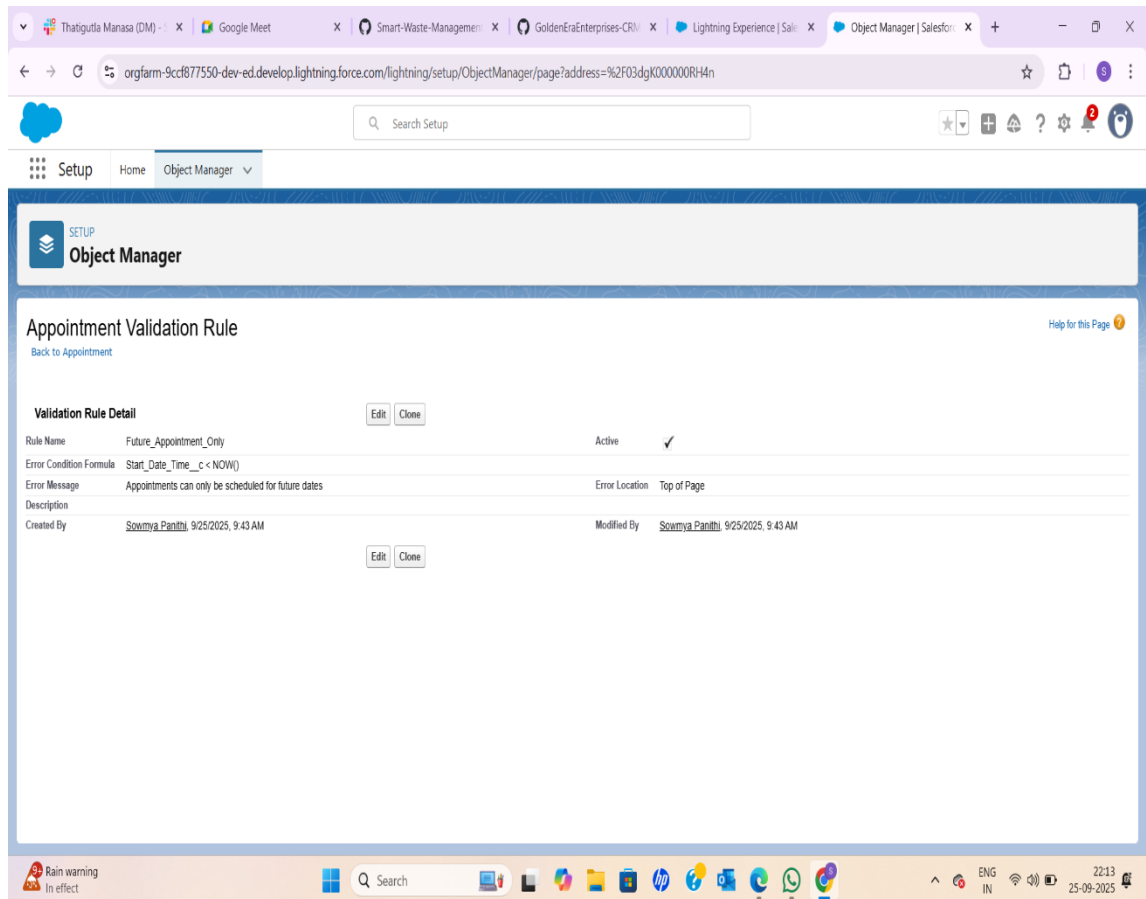


## Phase 4: Process Automation (Admin)

### Project Title: Hospital Management System - Salesforce CRM

#### 1. Validation Rules



Quick data quality checks for healthcare records:

#### Patient Object:

- Birth date cannot be future: `Date_of_birth__c > TODAY()`
- Blood group required for critical patients: `ISBLANK(Blood_Group__c) && Emergency_Status__c = "Critical"`

#### Doctor Object:

- Fee range validation: `Consultation_Fee__c <= 0 OR Consultation_Fee__c > 10000`
- Availability logic: `Availability_To__c <= Availability_From__c`

#### Appointment Object:

- Future appointments only: `Start_Date_Time__c < NOW()`
- Fee must match doctor rate: `Fee__c != Doctor__r.Consultation_Fee__c`

**Steps:** Setup → Object Manager → Select Object → Validation Rules → New

## 2. Process Builder

*Reference: Screenshots 1 & 2 - Process Builder implementations for "Daily Health Reports" and "Emergency Response Process"*

### Key Processes Created:

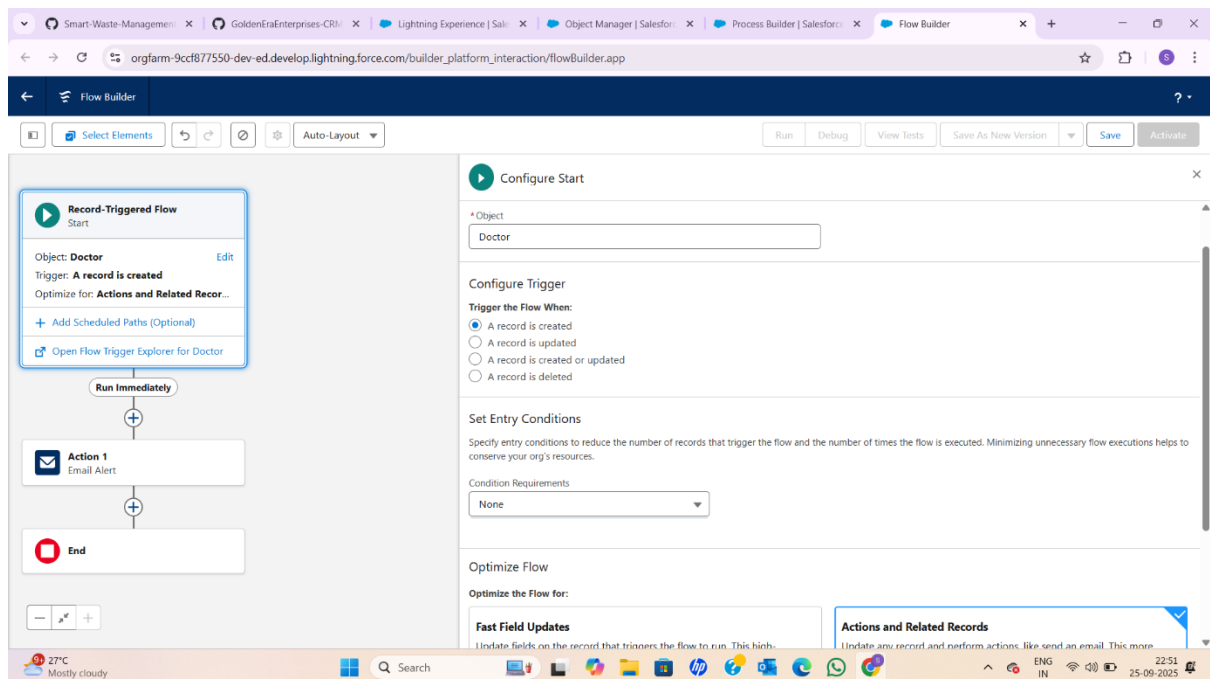
#### Daily Health Reports (Screenshot 1)

- **Trigger:** Doctor object with AI Prediction Event
- **Actions:**
  - Email alert (TRUE path)
  - Scheduled actions for daily reports
- **Purpose:** Automated morning briefings to medical staff

#### Emergency Response Process (Screenshot 2)

- **Trigger:** Doctor object with emergency criteria
- **Actions:** Immediate notifications to emergency team
- **Purpose:** Rapid response for critical situations

**Steps:** Setup → Process Builder → New → Define criteria → Add actions → Activate



## 3. Flow Builder

*Reference: Screenshot 3 - Flow Builder interface showing Record-Triggered Flow configuration*

**Flow Configuration Shown:**

- **Object:** Doctor (*as shown in screenshot*)
- **Trigger:** A record is created (*selected option*)
- **Optimization:** Actions and Related Records
- **Actions:** Email Alert → End

**Key Flows for Hospital System:**

- **Doctor Registration Flow:** Auto-notify admin when new doctor added
- **Patient Check-in Flow:** Update appointment status when patient arrives
- **Discharge Process Flow:** Generate discharge summary and follow-up tasks

**Steps:** Setup → Flows → New Flow → Configure trigger → Add elements → Save & Activate

**4. Field Relationships**

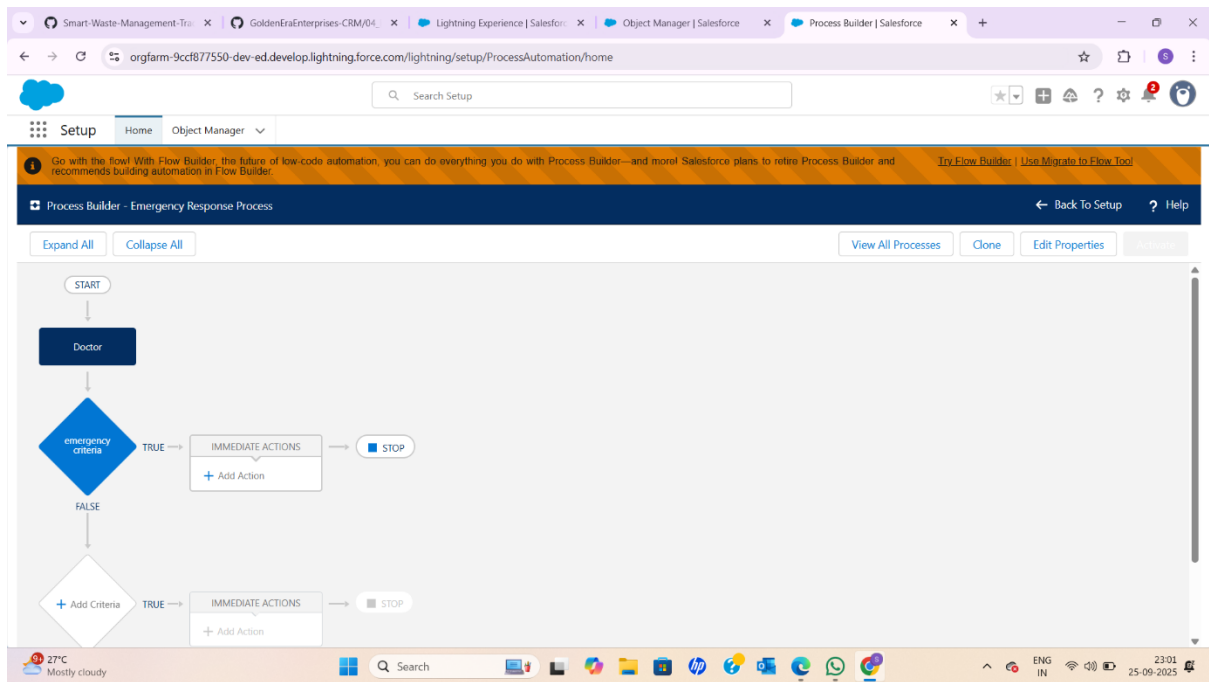
*Reference: Screenshot 4 - Appointment object showing Doctor and Patient lookup relationships*

**Critical Relationships Configured:**

- **Doctor** (Lookup to Doctor object) - Links appointments to healthcare providers
- **Patient** (Lookup to Patient object) - Links appointments to patients
- **Fee** (Currency field) - Consultation charges
- **Start Date/Time** (DateTime field) - Appointment scheduling

These relationships enable:

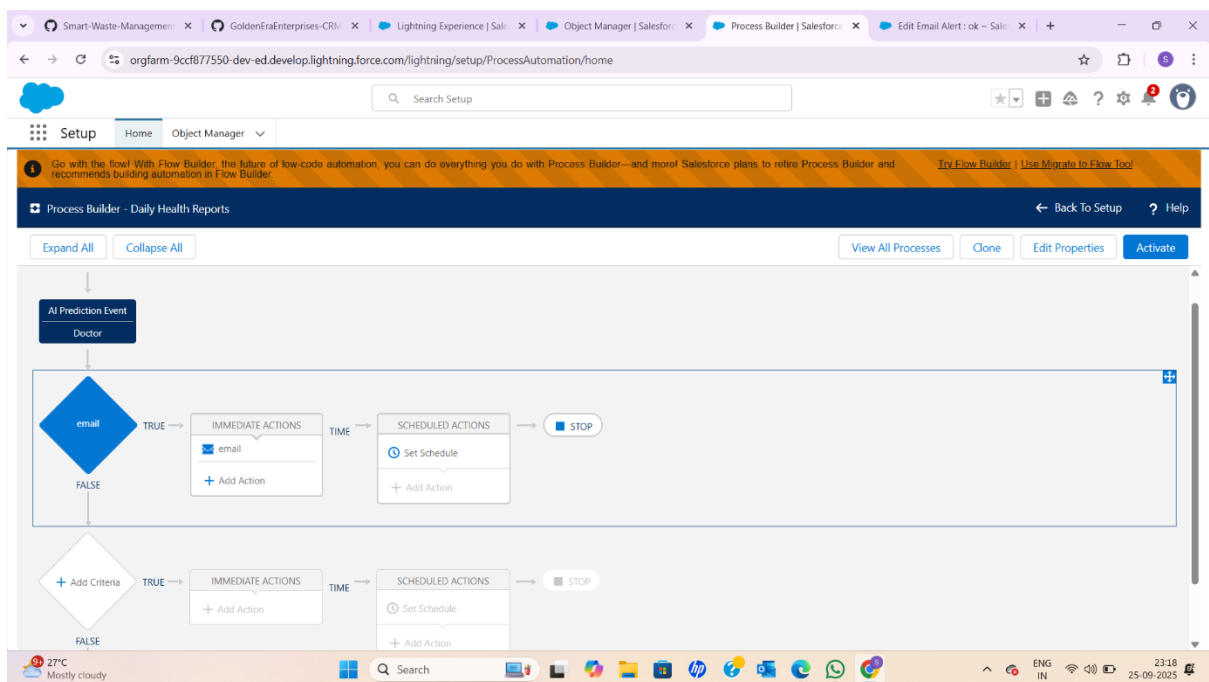
- Automated appointment confirmations
- Doctor availability tracking
- Patient communication workflows
- Billing process automation



## 5. Email Alerts

### Automated Communications:

- **Appointment Confirmations:** Patient receives booking details
- **Emergency Alerts:** Medical staff notified of critical patients
- **Daily Reports:** Department heads get morning briefings
- **Schedule Changes:** Auto-notify when doctor unavailable



## 6. Key Automation Benefits

**Patient Safety:** Validation rules prevent data errors **Efficiency:** Process Builder automates routine tasks

**Communication:** Email alerts keep everyone informed **Compliance:** Approval processes ensure proper authorization **Real-time Updates:** Flows handle complex multi-step processes