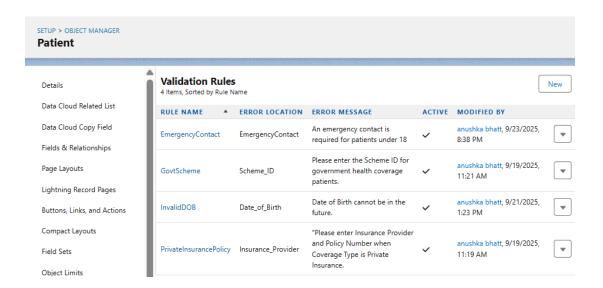
# PHASE-4

# **Validation Rules**

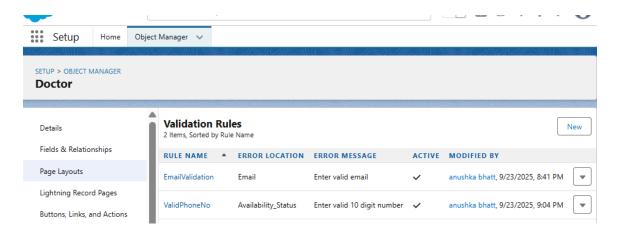
Object: Patient(Contact)

Name	Purpose	Formula
PrivateInsuranc ePolicy	If coverage_Type is private Insurance user needs to provide the Provider details and policy number	AND( ISPICKVAL(Coverage_Typec, "Private Insuranc OR( ISBLANK(Insurance_Providerc), ISBLANK(Insurance_Policy_Numberc) ) )
GovtScheme	If the patient's coverage_type is a government scheme like CGHS, ECHS, etc, provide schemeID	AND( OR( ISPICKVAL(Coverage_Typec, "CGHS"), ISPICKVAL(Coverage_Typec, "ECHS"), ISPICKVAL(Coverage_Typec, "ESIC"), ISPICKVAL(Coverage_Typec, "State Health Scheme") ), ISBLANK(Scheme_IDc) )
InvalidDOB	Date of Birth can't be in the future	Date_of_Birth >TODAY()
EmergencyCont act	If the patient is a minor Emergency Contact is a must	(TODAY() - Date_of_Birthc) / 365 < 18 && ISBLANK( EmergencyContactc)



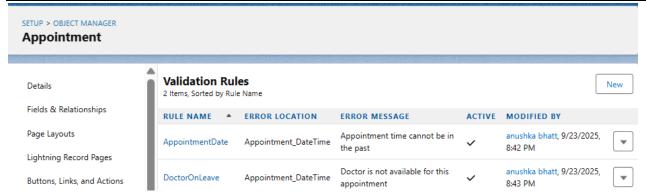
### Object: Doctor\_c

Name	Purpose	Formula
EmailValidation	Email should be valid	NOT(REGEX( Emailc , "^[A-Za-z0-9%+-]+@[A-Za-z0-9]+\\.[A-Za-z]{2,}\$"))
ValidPhoneNo	Phone must contain 10 digits	NOT(REGEX( Phonec , "^[0-9]{10}\$"))



## Object: Appointment\_\_c

Name	Purpose	Formula
AppoinmentDate	It can't be of past	Appointment_DateTimec < NOW()
DoctorOnLeave	An appointment can't be made for a date on which the Doctor is on leave	ISPICKVAL(Doctorr.Availabilit y_Statusc, "On Leave")



# **Approval Process:**

System contains custom object Treatment\_c, approval process if based on it.

## **Entry Criteria**

If EstimatedCost\_\_c for treatment > 0

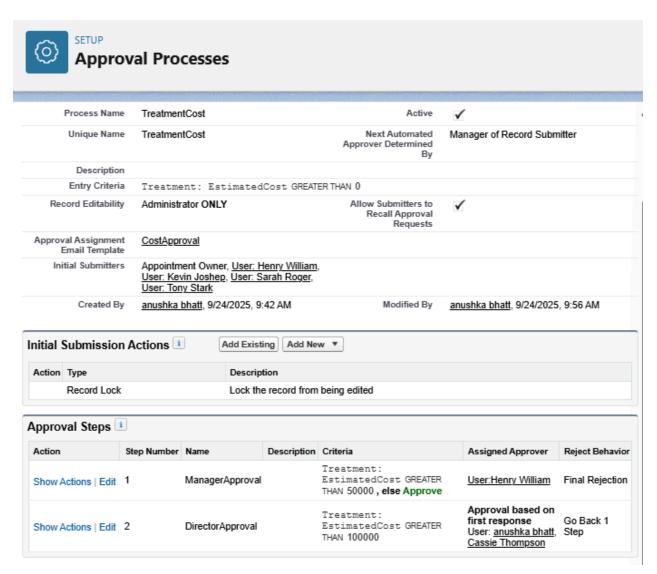
#### **Conditions:**

If estimatedCost is less than 50,000 → Automatically approve

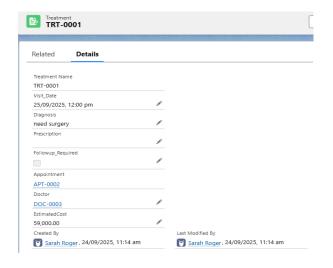
Else: need Hospital Manager approval

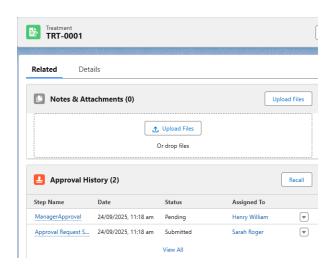
### Step2:

If estimated cost is greater than 100000 → need Director Approval



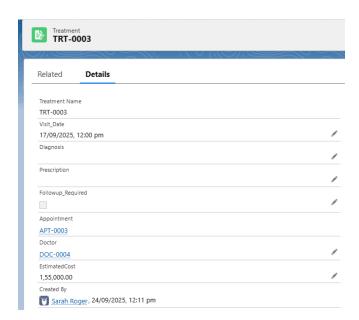
#### Care Team can submit the approval request





If the manager agree to approve he /she approves

If Cost is > 100000 goes to the director for approval



# Agent using agentforce

The goal of this Agent is to streamline patient registration and doctor appointment booking in the **CuraForce App**.

- Patients or staff can interact with the chatbot to create a new patient record.
- The chatbot will ask for basic patient details (name, age, gender, health issue).
- Based on the health issue description, the bot uses an Apex-powered NLP-like keyword matcher to suggest a suitable doctor specialty (e.g., Cardiologist for chest pain, Dermatologist for skin issues, General Physician for other conditions).
- The chatbot then shows a list of **available doctors** in that specialty.
- If the patient confirms, the chatbot books an appointment (DoctorPatient record) with the selected doctor.

This automation reduces manual data entry for staff and provides patients with quick doctor recommendations.

### **Current Implementation (Prototype Stage)**

## **Apex Class for Doctor Suggestion**

Implemented HealthIssueDoctorService class which:

- Reads patient health issue text.
- Maps keywords → suggested specialty.
   Queries doctors with Availability\_\_c = 'Available'.
- Returns a formatted list of doctor names & IDs.

```
public with sharing class HealthIssueDotorService {
   // Invocable request (input)
   public class Request {
     @ElmocableVariable (required=true)
     public String healthIssue;
     @ElmocableVariable
     public Integer maxResults; // number of doctorsreturn
}

public String suggestedSpecialty;
   // doctoristsv is "Ind Doctor Name; Ind Doctor Name;..."
     @ElmocableVariable
     public String suggestedSpecialty;
     // doctoristsv is "Ind Doctor Name; Ind Doctor Name;..."
     @ElmocableVariable
     public String suggestedSpecialty & Doctors' description='Return suggested specialty and small list of doctors based on health issue text')

public string suggestedSpecialty & Doctors' description='Return suggested specialty and small list of doctors based on health issue text')

public static ListcResponse> suggest(ListcRequest> requests) {
     ListcResponse> outputs = new ListcResponse>();
     for(Request req : requests) {
        String issue = (req.healthIssue = null) ? '' : req.healthIssue.tolowerCase();
        Integer maxR = (req.healthIssue = null) ? '' : req.healthIssue.and in req. maxResults;
        String spec = 'General Physician';

        // keyword rules
        if(issue.contains('chest') || issue.contains('heart') || issue.contains('angina') || issue.contains('palpit')) {
              spec = 'General Physician';
        } else if(issue.contains('skin') || issue.contains('rash') || issue.contains('itch') || issue.contains('psoriasis')) {
              spec = 'General Physician';
        } else of 'General Physician';
        } // Querying doctors for that specialty
        ListGoctor_co doctors = new ListGoctor_co();
}
```

```
// Querying doctors for that specialty
List<Doctor_c> doctors = new List<Doctor_c>();
try {
    doctors = [
        SELECT Id, Name, Specialty_c,Availability_Status_c
        FROM Doctor_c
        WHERE Specialty_c = :spec
        AND Availability_Status_c = 'Available'
        LIMIT :maxR
    ];
} catch (Exception e) {
    // if the Doctor_c object/fields not matched, fallback to empty list
    doctors = new List<Doctor_c>();
}

String csv = '';
for(Doctor_c d : doctors) {
    if(csv |= '') csv += ';';
    csv += String.valueOf(d.Id) + '|' + (d.Name == null ? '' : d.Name);
}

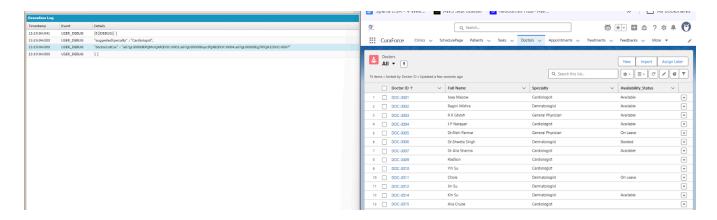
Response out = new Response();
out.suggestedSpecialty = spec;
out.doctorListCsv = csv;
outputs.add(out);
}
return outputs;
```

#### Tested apex class using executing this in anaonymous window

```
List<HealthIssueDoctorService.Request> reqs = new List<HealthIssueDoctorService.Request>();
HealthIssueDoctorService.Request r = new HealthIssueDoctorService.Request();
r.healthIssue = 'I have chest pain and difficulty breathing';
r.maxResults = 3;
reqs.add(r);

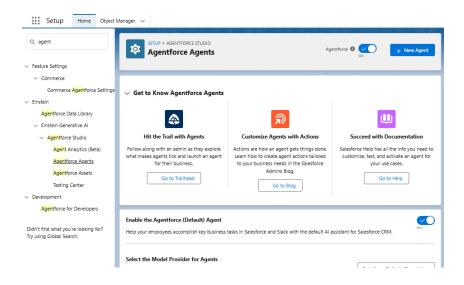
List<HealthIssueDoctorService.Response> res = HealthIssueDoctorService.suggest(reqs);
System.debug(JSON.serializePretty(res));
```

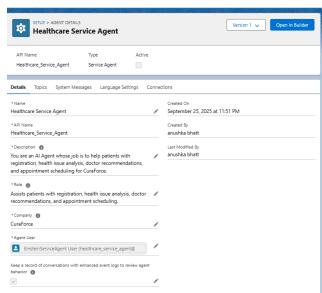
Result return Doc 004 and 007are cardiologist that are available.



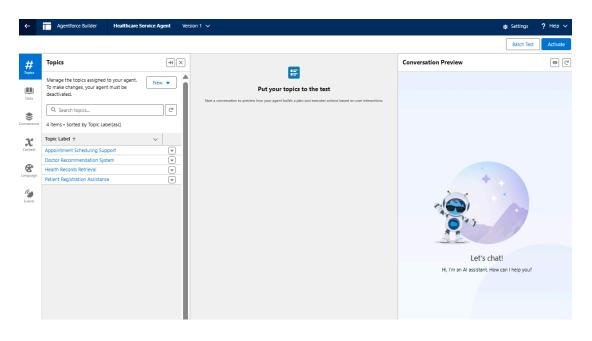
#### Steps to create Agent

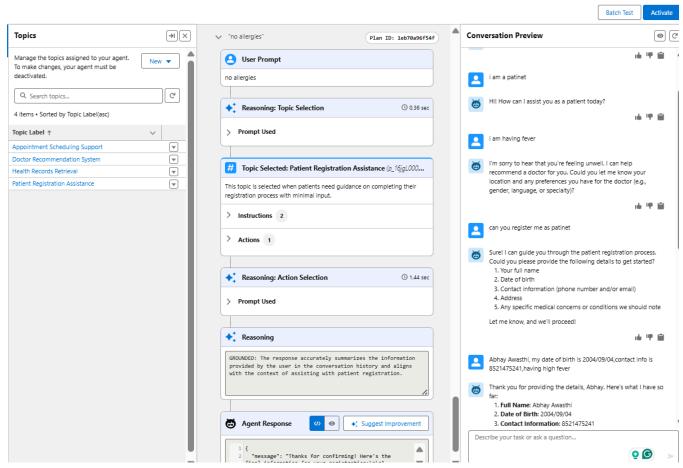
I already have all my agent permissions active so I directly head to creating new agent.

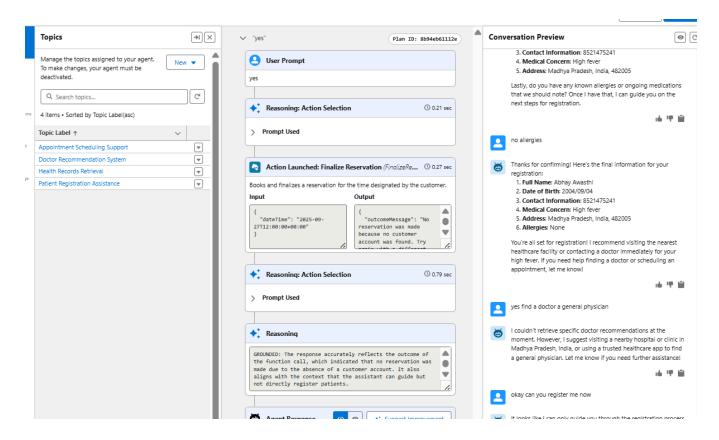




#### Set the topics for agent so that it give relevant answers





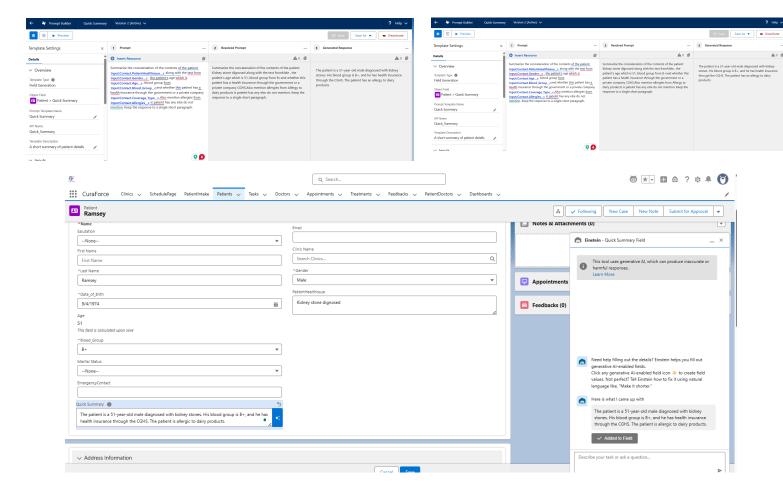


The agent is asking me as a patient to give information for required fields so that can create my patientaccount or check if i am already there. But I am working on functionality to book appointment and suggeting doctor. Right now the agent is under development.

## **Prompt Template**

I used the "Field Generation" prompt template to create a quick summary for patient using AI. Steps to create prompt template are

- Setup -> in the quick find box head to prompt builder → New Prompt Template → select type,Object , field of that object that you want to generate with Al,,give suitable name and description.
- In the new window type the prompt / instruction you want what type of summary and all.
- Preview various models and generated responses for each of them.
- And Select the one that suits you click save and active.
   Model used OpenAl GPT 4 Omni Mini, 0 toxicity detected.



# **Screen Flow**

Instead of agent, for the time being I implement **screen flow** for the same cause.I have utilized the apex class as apex action in the screen flow.

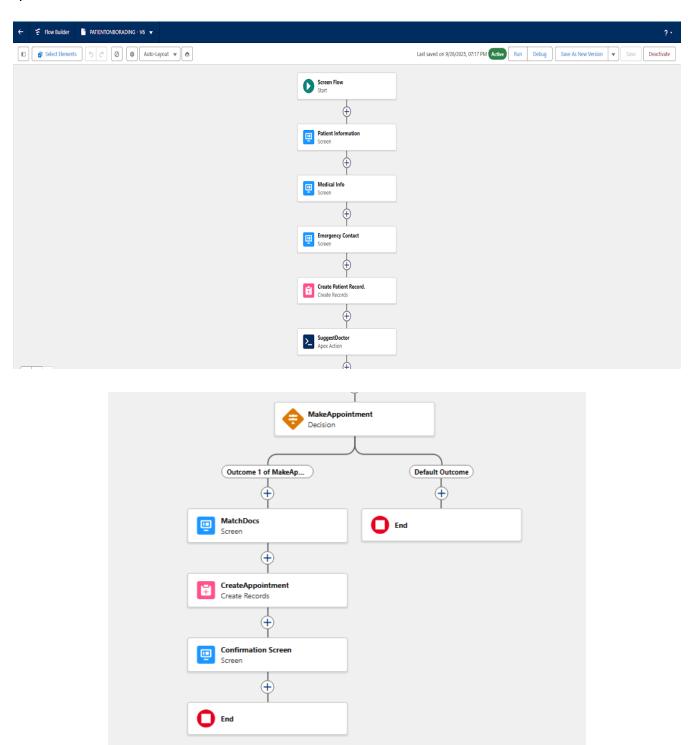
This flow starts by **collecting the required information of the patient** like name, gender, blood group, any allergies, and most importantly, current health issues, based on which later the patient gets suggested a specialty and a list of available doctors with that specialty.

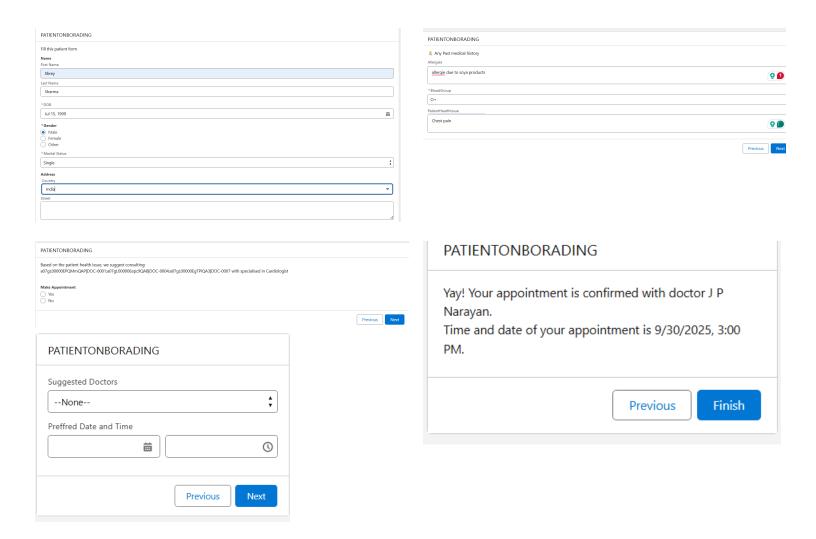
The create patient record component simply maps the flow variables to the actual patient record field and creates a patient record.

Using the same HealthIssueDoctorService apex class calling it using apex action component, **patient gets the suggested doctor and their speciality list**. Then, asked does he/she wants to book the appointment.

If it says yes in the next screen, it gets to choose one of the suggested doctors and preferred date and time, if that date and time obeys other validations we previously created, like preventing Double

booking, and if the doctor is available on that day. The booking gets confirmed, and the database gets updated.





### This flow is embedded in an app page named "PatientIntake" in the curaForce app.

