

# Nursing College Admission Assistant

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Developed by:

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College Reg no. : 12212531

GitHub: [github.com/Suryanshtyagi12/nursing-chatbot](https://github.com/Suryanshtyagi12/nursing-chatbot)

Demo: [huggingface.co/spaces/tyagisurya001/nursing-college-chat-assistant](https://huggingface.co/spaces/tyagisurya001/nursing-college-chat-assistant)

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## Objective

To build an intelligent, rule-based **AI Chat Assistant** for helping prospective students understand the **B.Sc Nursing admission process**, using strategic conversation design and interactive logic, with a focus on:

- ♦ **Intent-based chat branching**
  - ♦ Friendly Hinglish tone
  - ♦ Accurate program info
  - ♦ Interactive, user-driven navigation
  - ♦ Visibility for both light and dark themes
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## Architecture Overview

Component	Description
Logic	Rule-based with positive, negative, doubt keyword detection
Memory	Streamlit.session_state for question flow
UI Framework	Streamlit with customized chat styling
Hosting	Hugging Face Spaces (Public)

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## 1. Conversation Design & Strategic Flow

### ► Flow Structure:

- Starts with **admission interest**
- Moves to **eligibility**, then step-by-step through:
  - Course info
  - Fee breakdown

- Hostel
- Location
- Accreditation
- Clinical training
- Scholarships
- Final CTA to apply

#### ► User-Focused Logic:

- Seamless logical progression based on user inputs
- Keywords used to steer flow dynamically
- No AI hallucination—info is static and accurate
- Every step checks intent (positive/negative/doubt) before continuing

#### ► User-Friendly Tone:

- Hinglish (Hindi-English) for accessibility
- Use of emojis 😊💬
- Each message is short and conversational
- Encouraging prompts like “Bataun kaise?”, “Aur jaankari chahiye?”

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## 2. User Interaction & Response Handling

#### ► Intent Detection:

**Intent**    **Example Keywords**

Positive    haan, yes, okay, start, interested, batao

Negative    nahi, no, stop, cancel, exit

Doubt    kya, matlab, samajh, help, explain

#### ► Response Handling:

- **Positive** → Go to next question
- **Negative** → End politely: “Thik hai! Agar baad mein zarurat ho toh zaroor batana 😊”
- **Doubt** → Repeat current question simply with:  
“Koi baat nahi! Main aapko simple shabdon mein fir se samjhata hoon...”

#### ► Fallback Handling:

- Any input not matched with doubt/negative is assumed **positive** for smooth flow

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## 3. Information Accuracy & Completeness

All required topics have been **included with factual clarity**:

Topic	Included?
Initial Admission Intent	✓ Yes
Eligibility Check (Bio)	✓ Yes
Program Type	✓ Yes
Fee Structure & Installments	✓ Yes
Hostel Facilities	✓ Yes
College Location (Delhi)	✓ Yes
Recognition (INC)	✓ Yes
Clinical Training Details	✓ Yes
Scholarships Info	✓ Yes
Total Seats & Eligibility	✓ Yes

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### Full Conversation Flow

- Interest**  
→ *Kya aap nursing college mein admission lena chahte hain?*
  - Eligibility**  
→ *Aapne 12th mein Biology liya tha kya?*
  - Program Info**  
→ *Yeh B.Sc Nursing course full-time 4 saal ka hota hai. Aur detail chahiye?*
  - Fee Breakdown**  
→ *Fees ₹70,000/year: ₹60k tuition + ₹10k bus. Teen installment mein dena hota hai.*
  - Hostel**  
→ *Hostel mein 24x7 water, electricity, CCTV aur warden ki facility hai.*
  - Location**  
→ *College Delhi mein hai. Aur jaankari chahiye?*
  - Recognition**  
→ *College Indian Nursing Council (INC) se recognize hai.*
  - Clinical Training**  
→ *Backundpur, Chartha aur Ranchi hospitals mein training hoti hai.*
  - Scholarships**  
→ *Govt ₹18k–23k | Labour Ministry ₹40k–48k (Labour Reg. required)*
  - Final Info**  
→ *Total 60 seats. Eligibility: Biology in 12th, PNT pass, Age 17–35. Apply karna chahenge?*
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# Sample Interaction

User: Haan

Bot: Great! Aapne 12th mein Biology liya tha kya?

User: Mujhe samajh nahi aaya

Bot: Koi baat nahi! Main aapko simple shabdon mein fir se samjhata hoon: Aapne 12th mein Biology liya tha kya?

User: Nahi

Bot: Thik hai! Agar baad mein zarurat ho toh zaroor batana 😊

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## UI Snapshot (Highlights)

- ♦ Yellow chat text (visible in dark/light mode)
- ♦ Soft blue background for calming effect
- ♦ Friendly onboarding instructions and example questions