4. Existing System

Existing System

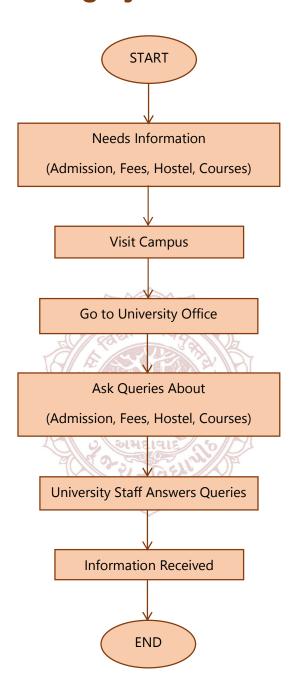
At present, most universities do not have a dedicated chatbot system to handle student or visitor queries. Information is usually provided through two main sources:

- Physical Enquiry: Students and parents often need to visit the campus in person to ask about admissions, courses, fees, hostel facilities, and other details. This requires extra time, travel, and effort, which can be inconvenient for people coming from distant places.
- 2. University Website: The official website typically provides general information about the institution, courses, and facilities. However, the details are often spread across multiple pages and documents, which makes it difficult for new students to find what they need. The website is static and cannot give personalized or instant responses to specific questions.

The existing system often lacks:

- Visiting the campus physically is time-consuming and inconvenient.
- Websites provide only static information and cannot answer follow-up questions.
- Lack of an interactive support system leads to confusion and delays in decisionmaking.
- University staff face additional workload during admission season, as they need to respond to the same queries repeatedly.

4.1-Existing System Flow Chart



5.Existing System Problem Areas

1. Time-Consuming Process

Students and parents often need to travel to the campus to get information, which leads to delays and inconvenience.

2. Static Website Information

University websites usually provide only static content. Users must search through multiple pages and documents to find the required details.

3. Lack of Instant Support

There is no system that provides immediate answers to queries. Visitors often wait for office hours or staff availability.

4. Repetitive Workload for Staff

During admission seasons, staff members handle the same set of questions from multiple students, which increases workload and reduces efficiency.

5. Accessibility Issues

People from remote areas or those unable to travel find it difficult to access accurate and timely information.

6. No Personalized Guidance

The current system cannot adapt to specific queries. It provides general information only, without interactive clarification or follow-up answers.

6.System Analysis

1. Existing System Analysis

- Process: Students and parents rely on physical visits or static websites for information.
- Limitations: Time-consuming, lacks interactivity, not accessible 24/7, and increases staff workload.
- Problems Identified: Delays in getting answers, repetitive queries for staff, and difficulty in accessing accurate information quickly.

2. Proposed System Analysis

- Process: A chatbot will act as a virtual assistant, accessible through web or mobile platforms.
- **Features:** Instant query resolution, 24/7 availability, interactive responses, and database-driven accuracy.
- Advantages: Saves time, improves user convenience, reduces staff workload, and provides modernized support.

6.1-Objectives to Be Fulfilled

The main objective of this project is to develop a chatbot system that provides accurate and instant information to students and parents about university-related queries. The specific objectives are:

- 1. **To provide instant answers** to queries related to admissions, courses, fees, hostel facilities, and other university information.
- 2. **To reduce the dependency** on physical visits and manual enquiries at the campus.
- 3. **To minimize the workload of staff** by handling repetitive and common queries automatically.
- 4. **To improve accessibility** of information for students and parents from remote locations.
- 5. **To offer 24/7 availability**, allowing users to interact with the system anytime.
- 6. **To create a user-friendly interface** that makes interaction simple, conversational, and efficient.

6.2-Scope of Proposed System

The proposed system is a **university information chatbot** designed to provide instant and accurate answers to student and parent queries. Instead of relying only on physical visits or static website content, the chatbot will act as a virtual assistant that can be accessed through a web or mobile platform.

The chatbot will handle questions related to admissions, courses, fees, hostel facilities, deadlines, and other university-related information. By using Natural Language Processing (NLP) and a structured database, the system will identify the intent of the query and deliver a suitable response within seconds.

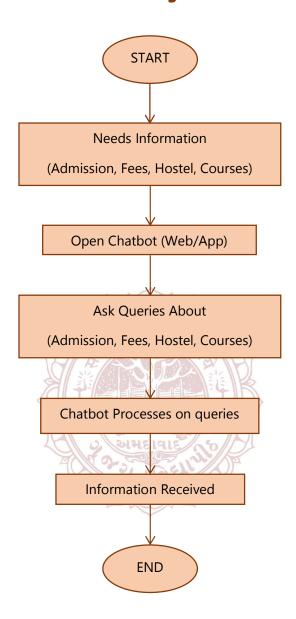
In Scope

- o Providing information about admission procedures, deadlines, and eligibility.
- o Answering queries about different courses, duration, and fees.
- Offering details of hostel facilities and other student services.
- Allowing users to interact in a conversational manner through a web-based chatbot interface.
- Ensuring availability of information 24/7.
- Reducing repetitive workload for university staff by automating common queries.

Out of Scope (Future Enhancements)

- Voice-enabled queries and responses.
- o Multilingual support for non-English users.
- o Integration with live human agents for complex queries.
- o Advanced AI features such as personalized recommendations.

Proposed Chatbot System Flow Chart



6.3-System Features

The proposed chatbot system will include the following features:

- 1. **Interactive Chat Interface:** Provides a simple and user-friendly interface where students and parents can type questions in natural language.
- 2. **Admission Information:** Offers details about admission procedures, eligibility criteria, important dates, and required documents.
- 3. **Course Details:** Provides information about available courses, duration, syllabus outline, and career scope.
- 4. **Fee Structure:** Displays course-wise fee details in a clear and organized manner.
- 5. **Hostel and Facility Information:** Shares details about hostel availability, accommodation charges, and facilities provided by the university.
- 6. **24/7 Availability:** Accessible at any time, ensuring users can get information even outside office hours.
- Instant Query Resolution: Reduces waiting time by providing immediate answers to frequently asked questions.
- 8. **Database-Driven Accuracy:** Uses a structured database/JSON to store information, ensuring responses are reliable and up to date.
- Reduced Staff Workload: Handles repetitive and common queries automatically, allowing staff to focus on more complex tasks.
- 10. **Future-Ready Design:** Can be expanded to support voice interaction, multilingual queries, and integration with live support.
- 11. **User-Friendly Interaction:** Simple conversational interface where users can ask questions naturally.
- 12. **Scalability:** The system can be expanded in the future to include advanced features like multilingual support, voice interaction, or integration with live agents.

Benefits of the Proposed System

- Saves time and effort for students and parents.
- Provides personalized and interactive guidance.
- Makes university services more accessible, especially for remote users.
- o Reduces the heavy workload on university staff during admission seasons.
- Enhances the image of the institution as a technology-driven and studentfriendly place.