

# Mini Chatbot Using Python

## Objective

The objective of this assignment is to help interns understand how chatbots work by building a simple **rule-based mini chatbot** using Python. Interns will learn to implement **conditional logic** and gain basic exposure to **Natural Language Processing (NLP)** using the **NLTK library**.

This project will enhance problem-solving skills and introduce real-time application development concepts.

## Task Description

Interns are required to develop a **Mini Chatbot** that can respond to common user inputs such as greetings and frequently asked questions (FAQs).

### Key Features to Implement:

#### 1. Greeting Responses

- The chatbot should respond to inputs like:
  - "Hi"
  - "Hello"
  - "Hey"
  - "Good morning"
  - "Good evening"

#### 2. FAQ Handling

- Program the chatbot to answer basic FAQs such as:
  - What is your name?
  - What can you do?
  - Who created you?
  - What is Python?
  - How can you help me?

#### 3. Conditional Logic

- Use **if-else** or **elif** statements to match user inputs.
- Ensure inputs are case-insensitive.

#### 4. Optional NLP (Bonus Task)

- Use **NLTK** library to:
  - Tokenize user input
  - Identify keywords
  - Improve response accuracy

## 5. Exit Command

- User should be able to exit by typing:
  - "bye"
  - "exit"
  - "quit"

## Technical Requirements

- Programming Language: **Python**
- Concepts to use:
  - Functions
  - Conditional statements
  - Loops
  - String handling
  - (Optional) NLTK library

## Submission Guidelines

Interns must submit:

1. **Python source code file** (`chatbot.py`)
2. **README file** including:
  - Project overview
  - Features
  - How to run the program
3. **Screenshot or screen recording** of chatbot execution



## Deadline

**Submission Deadline:**



**Within 3 Days from Assignment Date**

Late submissions may impact evaluation.



## Evaluation Criteria

- Proper implementation of chatbot logic
- Accuracy of responses
- Code readability & comments
- Optional NLP implementation (Bonus marks)
- Creativity & additional features



## Bonus Enhancements (Optional)

- Add more FAQs
- Integrate date & time responses
- Create GUI using Tkinter
- Store chat history in a file