

PHASE 1

Problem Definition

Date	28 sep 2023
Team Id	Proj-212175-Team 2
Project Name	Chatbot in python
Maximum mark	

ABSTRACT:

This project aims to develop a chatbot using the Python programming language to facilitate human-computer interactions through natural language conversations. The chatbot's primary objective is to comprehend user input, generate contextually relevant responses, and potentially perform actions or retrieve information.

By leveraging Python's versatility and an array of natural language processing (NLP) libraries and frameworks, this chatbot will be designed to adapt and evolve to various conversational intents and user needs.

The project will explore techniques for dialogue management, language understanding, and response generation to create an intelligent and engaging chatbot capable of delivering a seamless conversational experience.

PROBLEM DEFINITION:

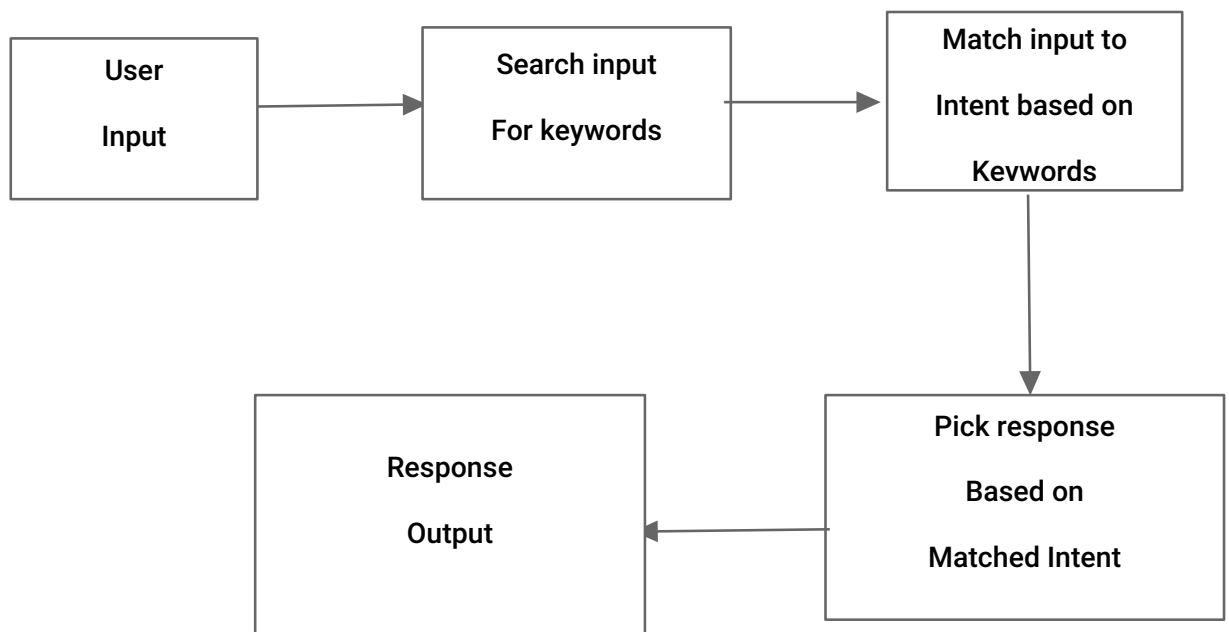
Design and implement a chatbot using Python that can engage in natural language conversations with users. The chatbot should be capable of understanding user input, providing relevant responses, and potentially performing specific tasks or providing information based on user queries. The chatbot's functionality should be customizable, allowing for the incorporation of various conversational intents, such as answering questions, offering recommendations, or assisting with tasks. The goal is to create an intelligent and user-friendly chatbot that enhances user interaction and delivers a satisfactory conversational experience.

DESIGN THINKING:

Chatbots can be as simple as rudimentary programs that answer a simple query with a single-line response, or as sophisticated as digital assistants that learn and evolve to deliver increasing levels of personalization as they gather and process information.

Clearly define the problem your chatbot aims to solve based on user needs.

Develop the chatbot's backend logic using Python.



PROBLEM SOLUTION:

Feature Selection:

Based on the priority scores, select the top ideas or features to include in the initial version of your chatbot.

Implementation Plan:

Outline the steps, tasks, and timelines for implementing the selected ideas/features.

Testing and Feedback:

Describe your plan for testing the chatbot with real users to gather feedback and make improvements.

Iteration and Future Ideas:

List any ideas or features that were not selected for the initial release but may be considered for future versions of the chatbot.

This template will help you systematically brainstorm ideas, assess their potential impact and feasibility, and prioritize them based on their relevance to your project's objectives and the needs of your target users.

BrainStorming:

- **Idea generation:**

Chatbots can be used to generate new ideas by combining and recombining existing ideas, or by generating new ideas from scratch. Chatbots can be trained on a dataset of ideas, or they can use their knowledge of the world to generate new ideas.

- **Expanding on ideas:**

Chatbots can be used to expand on existing ideas by generating new information or insights related to those ideas. For example, a chatbot could be used to generate a list of potential features for a new product, or to generate a list of potential marketing messages for a new product launch.

IDEAS:

- **Customer support Chatbot:**

Develop a chatbot that assists customers with common queries, troubleshooting, and FAQs for a product or service

- **Healthcare Chatbot:**

Create a healthcare chatbot that provides users with medical information, symptom checker, and appointment scheduling with doctors.


- **News and Update Chatbot:**

Develop a chatbot that provides users with the latest news, updates on specific topics, or personalized news recommendations.

•Gaming Chatbot:

Design a chatbot for gaming enthusiasts that provides game-related information, tips, and even in-game assistance

Brainstorm & Idea Prioritization Template:



Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

🕒 10 minutes to prepare
🕒 1 hour to collaborate
👥 2-8 people recommended

➔

Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

🕒 10 minutes

A **Team gathering**

Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

B **Set the goal**

Think about the problem you'll be focusing on solving in the brainstorming session.

C **Learn how to use the facilitation tools**

Use the Facilitation Superpowers to run a happy and productive session.

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Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

🕒 5 minutes

PROBLEM

How might we [your problem statement]?

Key rules of brainstorming

To run a smooth and productive session

➕ Stay in topic. ⚡ Encourage wild ideas.

➕ Defer judgment. 👂 Listen to others.

🗣️ Go for volume. 👁️ If possible, be visual.