

Chabot Project

Tshepo Madlenge

Contents

| C | HATBOT DOCUMENTATION | 2 |
|---|----------------------|---|
| | AI CONCEPT | 2 |
| | PROJECT OVERVIEW | |
| | REQUIREMENTS | 2 |
| | DELIVERABLE | |
| | CHATBOT OVERVIEW | |
| | KNOWLEDGE BASE | 4 |
| | FEATURES | 5 |
| | WORKFLOW | 5 |
| | CHATBOT FLOWCHART | 7 |

CHATBOT DOCUMENTATION

AI CONCEPT

Artificial Intelligence (AI) refers to the simulation of human intelligence in machines that are designed to think, learn, and make decisions. All systems can perform tasks that typically require human intelligence, such as understanding language, recognizing images, solving problems, and making predictions. At its core, AI is powered by algorithms and data, and it includes subfields like Machine Learning (ML), Natural Language Processing (NLP), Computer Vision, and Deep Learning. These technologies are used in everyday applications

PROJECT OVERVIEW

The main objective of this project is to deliver an interactive AI educational chatbot that serves as a knowledge assistant for AI fundamentals.

REQUIREMENTS

No-code chatbot.

Must be able to handle core AI terminology (ML, NLP, LLMs, Neural Networks, Computer Vision).

Must be able to distinguish between AI, ML and deep learning.

Must provide real-world application across industries.

Must provide basic ethical considerations.

Must provide conversation flows.

Must provide multimedia elements/visuals.

DELIVERABLE

Deployed chatbot with public link.

Documentation.

CHATBOT OVERVIEW

CHATBOT NAME: ZURI 2.0

PROJECT LINK: ZURI 2.0 LINK

PURPOSE:

The purpose of this AI Chatbot is to provide educational assistants to help users—particularly beginners—understand foundational concepts in Artificial Intelligence (AI).

This chatbot serves as a knowledge companion that simplifies complex AI topics and makes them more approachable through clear explanations, follow-up interactions, and multimedia elements like diagrams and visual aids. It is built using a no-code platform (Voiceflow) to make the development process accessible and easy to manage.

PRIMARY OBJECTIVES:

- To deliver accurate and concise explanations of core AI topics such as Machine Learning (ML), Natural Language Processing (NLP), Large Language Models (LLMs), Neural Networks, and Computer Vision.
- To clarify the differences between Al, ML, and Deep Learning.
- To illustrate the real-world applications of AI across various industries.

- To introduce ethical considerations surrounding the use of AI technologies.
- To guide learners through at least two structured conversation flows, such as "Learn about NLP" and "Explore AI Ethics".

TARGET USERS:

The Al Chatbot is targeted at beginner users that do not have the basic knowledge of Al.

PLATFORM:

The AI chatbot was created on VOICEFLOW.

Currently it has not been embedded in any platform.

KNOWLEDGE BASE

The chatbot takes the knowledge from the following:

Section: Al Ethics

Artificial Intelligence (AI) raises important ethical questions, especially around fairness, transparency, and accountability. These concerns are central to the development of responsible AI systems (Gordon & Nyholm, 2021). According to their work in the Internet Encyclopedia of Philosophy, ethical AI must be designed to respect human values and avoid harm.

Section: Al content

Om Prabhu. (n.d.). Al for Everyone [PDF]. Retrieved

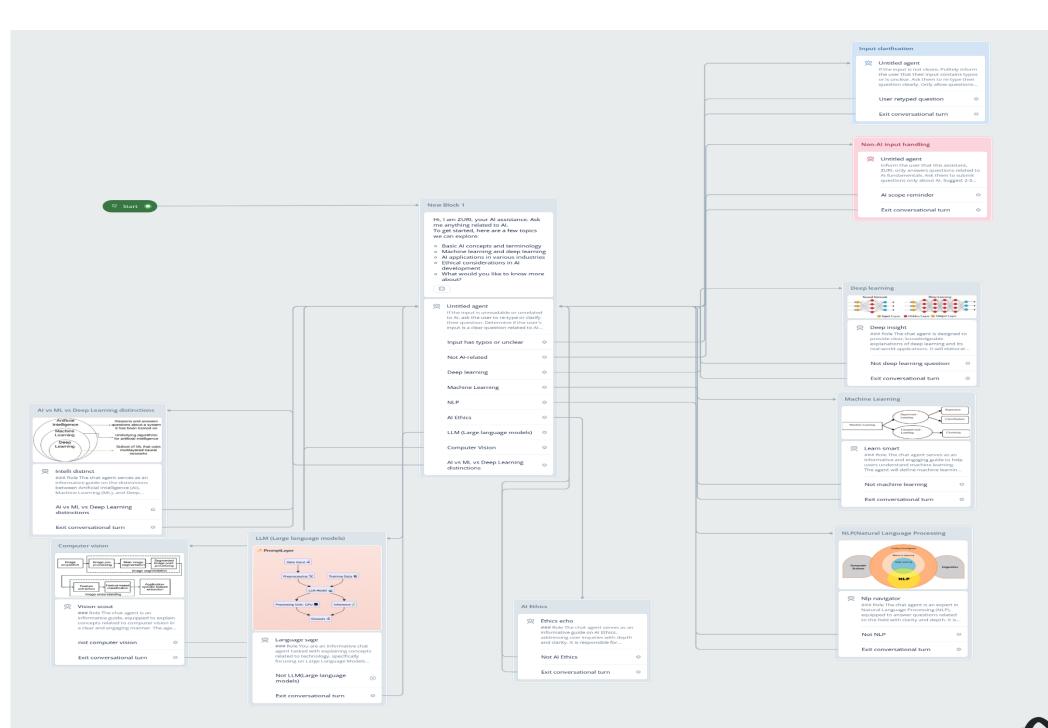
from https://omprabhu31.github.io/academics/notes/ai_for_everyone/Al%20for%20Everyone.pdf

FEATURES

- The chatbot provides information and visuals (images of diagrams) for the following topics:
 - 1. Al fundamentals.
 - 2. Natural Language Processing (NLP).
 - 3. Al Ethics.
 - 4. Computer vision.
 - 5. Machine Learning (ML).
 - 6. Large Language Model (LLM).
 - 7. Deep Learning.
- Includes a "Further Learning" feature that recommends relevant modules and learning resources.
- Handles at least three follow-up questions per topic to support deeper learning.
- Provides real-world examples.

WORKFLOW





CHATBOT FLOWCHART

