Project Documentation: BotKnows AI Chatbot

## 1. INTRODUCTION PHASE

## 1.1 Introduction

BotKnows is an educational chatbot developed on the Landbot platform. It is designed to help users learn about Artificial Intelligence (AI) through interactive guided conversations. The chatbot provides information in education, healthcare, security, shopping, transport, machine learning, deep learning relation, cons-AI bias, cons-AI privacy, definition of (CV, large language model, neural network, natural language processing, and their responses with follow-up questions.

* Tested conversations flows.
* Integrated BotKnows with messaging platform (Dialog Flow messenger)
* Included multimedia elements where hyperlink is added for more information.
* Added profile picture and chose theme
* View conversation logs and analytics.
* Use insights to improve your chatbot.

## 1.2 Aim

To build an accessible, no-code chatbot for AI education that simplifies complex AI concepts for beginner and intermediate learners.

## 1.3 Problem Definition

There is a lack of accessible, interactive platforms for introducing AI concepts in a user-friendly manner without requiring advanced technical knowledge.

## 1.4 Hypothesis

If we use a no-code chatbot platform to present AI education in guided conversation flows, then users will better understand AI concepts without needing a technical background.

### 1.5 Objectives

- To create an interactive AI educational assistant.  
- To deploy the chatbot for public use.  
- To include key AI topics and applications.  
- To ensure accessibility without requiring coding skills.

### 1.6 Justification

Chatbots can enhance digital learning. Using Landbot allows quick development and deployment, reducing technical complexity for educators and learners.

### 1.7 Expectations

- Users will engage with AI topics in a structured flow.  
- Improved understanding of basic AI concepts.  
- Increased interest in further AI learning.

### 1.8 Conclusion

This chatbot bridges the gap between traditional learning and modern AI knowledge delivery by using a no-code conversational platform.

## 2. PLANNING PHASE

### 2.1 Identification of Need

AI is a growing field, but foundational educational tools are limited in accessibility and interactivity.

### 2.2 Preliminary Investigation

Research showed learners prefer conversational and interactive tools. Tools like Landbot support these preferences.

### 2.3 Feasibility Study

- Technical: Landbot supports required features.  
- Operational: Easy to use, intuitive, and web-based.  
- Economic: Free and low-cost plans available.

### 2.4 Project Planning

Defined scope: AI education chatbot. Stakeholders: learners, educators, developer. Platform: Landbot.

### 2.5 Project Scheduling

Created PERT and Gantt charts (attached separately) for milestones.

### 2.6 Software Requirement Specification

- Web browser  
- Internet access  
- Landbot platform  
- Chatbot flow with AI topics

### 2.7 Data Models

- Linear flows per topic  
- Button-driven navigation

## 3. ANALYSIS PHASE

### 3.1 Introduction

Detailed analysis of existing educational resources and gap identification.

### 3.2 Information Gathering Methodology

- Observation: User engagement with traditional learning.  
- Interviews: Feedback from educators and students.

### 3.3 Analysis of Existing System

Current systems are static, text-heavy, and lack interaction.

### 3.4 Data Analysis

Focus on AI topics frequently searched and misunderstood.

### 3.5 Weakness of the Current System

- Low engagement  
- Limited interactivity  
- High technical barrier

### 3.6 Analysis of Proposed System

- Simple, button-based flows  
- Non-technical user interaction  
- Educational value

### 3.7 Non-Functional Requirements

- Usability  
- Accessibility  
- Compatibility across devices

### 3.8 Data Modeling for Proposed System

Topic-based flow blocks with predefined questions and responses.

## 4. SYSTEM DESIGN PHASE

### 4.1 Introduction

Design focuses on usability and clarity.

### 4.2 System Design

- Welcome message  
- Topic selection menu  
- Guided educational responses

### 4.3 Architectural Design

- Software Architecture: Web-based frontend using Landbot.  
- Hardware: Runs on any device with internet.  
- Network: Hosted by Landbot cloud services.

### 4.4 Physical Design

Hosted on Landbot servers with public link access.

### 4.5 Database Design

No traditional database. Static response paths.

### 4.6 Program Design

Created through Landbot’s visual builder. Pseudo code replaced with flowchart logic.

### 4.7 Interface Design

- Menu-driven UI  
- Clear question and answer layout  
- Visual buttons for topic selection

### 4.8 Security & Backup Design

Landbot handles backups and security via HTTPS and account-based access control.

## 5. IMPLEMENTATION PHASE

### 5.1 Introduction

Final stage involved building, testing, and deploying the bot.

### 5.2 Coding

No traditional coding required. Built using Landbot’s drag-and-drop interface.

### 5.3 Testing

Tested with multiple users for flow accuracy and clarity.

### 5.4 System Testing

Evaluated each conversation path. Adjusted based on feedback.

### 5.5 Installation

Hosted and deployed via a public Landbot link.