

# Curriculum For Building GPT Voice Controlled Jarvis Helmet

## Module 1: Introduction and Project Overview

Objective: Understand the project's purpose, components, and potential Applications.

### 1.1 High-level Project Overview

- Explanation of the project's concept and functionality.
- Overview of key components and their interactions.

### 1.2 Why Are We Building This?

- Discuss the motivation behind building a GPT/Voice Controlled Jarvis Helmet.
- Explore potential benefits and use cases.

### 1.3 Applications

- Discuss potential applications beyond the basic functionality.

## Module 2: Hardware Setup

Objective: Set up the required hardware components for the Jarvis Helmet.

### 2.1 Bill of Materials and Resources

- List of required hardware
- Links to purchase or access components.

### 2.2 Hardware Connections:

- Detailed instructions on connecting hardware components to the Raspberry Pi.
- Explanation of GPIO pin configurations and wiring.

## Module 3: Software Configuration

Objective: Configure the Raspberry Pi and install necessary software Dependencies.

### 3.1 Raspberry Pi Setup

- Step-by-step guide to setting up the Raspberry Pi 4/5 for the project.
- Installation of Raspbian OS and initial configuration.

### 3.2 Installing Dependencies

- Instructions for installing required software libraries and packages.
- Dependencies include libraries for speech recognition, audio processing, and GPIO control.

### 3.3 Creating Code Modules

Writing scripts for various functionalities:

1. Voice Recognition (speech2text.py)
2. Chatbot Integration (chat2jarvis.py)
3. Helmet Control (openhelmet.py)
4. Wake Word Detection (wakeword.py)
5. Voice Generation (voice\_gen\_openai.py)
6. Main Control (main.py)

### 3.4 Final Demo:

1. Integration of code modules into a final demo.
2. Testing and troubleshooting the system.

## Module 4: Future Potential and Conclusion

Objective: Explore future possibilities and conclude the course.

### 4.1 Future Potential

- Discussion on potential enhancements and expansions of the project.
- Ideas for integrating the Jarvis Helmet with smart home systems, weather APIs, and other external services.

### 4.2 Further Resources

Introduction to advanced courses or resources for augmented AI development.

- Recommendations for further learning and exploration. Project Store and Community
- Links to project repositories or stores for sharing and accessing additional resources.