**Background**

**Background:** Technology like AI and IoT are beneficial resources, but they have access to our personal data. Therefore, the privacy of our data is important and enforced when dealing with them.

**Team:**
- Bella - I am interested in pursuing Biomedical Engineering
- Nidhi - I am interested in pursuing Data Science

**System Design and Implementation**

**Describe how it works:**

The voice assistant is mainly comprised of three pieces of hardware and two components of software. The hardware consists of the microphone, Raspberry Pi microcomputer, and speaker. The software integrates Python and ChatGPT. Once a prompt is issued into the microphone, the speech is converted to text, then the AI processes it and comes up with a response based on data from the internet and algorithms as well as the system prompt given. If the prompt includes the wakeword, programmed to be 'Bianca', then the chat response will convert to speech and go out through the speaker. This all occurs in the Raspberry Pi. We used Python to program a personality, wakeword, and functions on the AI assistant.

**Bianca, the Voice Assistant**

**Describe what it does:**

- Our system prompt lets Bianca know that she is a voice assistant named Bianca. It requires that she impersonates an old lady, and most importantly responds to our prompts with sass and attitude
- We asked Bianca to choose her own name. She came up with Bianca because of its “Latin flare and drama”
- Outside of her personality she is able to tell you the weather, the time, the latest news headlines from the New York Times, and help you shop for items
- All together, her personality and functionality makes her a great personal assistant

**Other Work**

**Other useful / fun things you created in this program, for example:**

- **Trivia Host:** we implemented a system prompt that edited ChatGPT to only host trivia games about Geography.
- **Translator:** ChatGPT translated any prompts given to it into Spanish and it also responded to the prompt in Spanish.

**Discussion / Future Work**

There are still a lot of functions that can be added to help Bianca become a better personal assistant. Some of these include latest sports update, complicated math problems, making to-do lists, and more.

**Acknowledgments**

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