2024 PROPERDATA SUMMER PROGRAM on PRIVACY, IoT & AI

Scarlett GPT
Julia Rezko and Olivia Clarke
Sunny Hills High School, Corona del Mar High School

Scarlett, the voice assistant

She is:
- Sassy
- Positive
- Energetic
- Friendly
- Kind
- has a “nova” voice

Scarlett is able to:
- tell time and date
- set a light to a specific color
- search for a location
- get the weather
- search for news
- grab a New York Times headline
- search for a product in MyStore
- submit an order on MyStore
- add/delete an event from calendar and recall
- keep track of a shopping list
- tell jokes and riddles

Background

AI is implemented more in day-to-day lives, and with that comes the choice of what to do with it. Will it be a tool whose capabilities are expanding or something we avoid? With technological advancements being made, privacy becomes more of a topic. It’s important to know how to keep your data safe, and through this program we learned about the ways data can be stolen, but also the positive impact of the internet.

System Design and Implementation

How it works (shown in the photo above): The system takes in the audio spoken through the mic (activated if the noise is over a specific threshold and a wake word is used). It then translates the spoken words to text, to make it readable. After, the system reads the user’s prompt and prints a written response. It can then translate the text into speech when played on the speaker.

Discussion / Future Work

Scarlett has a limit on the accuracy of the colors she can produce. She also is not able to order actual groceries or fast food, which we hope she can do in the future.

command: “make orange”

Acknowledgments

We want to sincerely thank all the staff that encouraged and helped us during the program. Thank you so much for this opportunity! We couldn’t have accomplished this without you.

Other Work

Scarlett is also able to:
- host a trivia game while keeping track of points
- translate from English to any language
- host “Finish the Lyric” with recent or older songs

while True:
    audio_in = listen()
    user_prompt = speech_to_text(audio_in)
    print("Prompt:", user_prompt)
    if verify_wakeword(user_prompt):
        response = chat(user_prompt)
        print("Response:", response)
        audio_out = text_to_speech(response, "openai", "nova")
        play(audio_out)