Native User Interface

Two things that determine the success of software are its usability and looks. Currently Melissa works only via the command line. You built a web interface, but it doesn't have the best workflow, and it is dependent on the user running the Python `web-gateway.py` file and the voice engine from the command line.

I would like to have a user interface for Melissa that uses the widely used UI Framework (still under discussion) for Python. This would help users interact with Melissa more easily. This is quite a task and would definitely require some time to construct, but it is a very high priority for the project to have a good UI.

Offline Speech-to-Text (STT)

Another high-priority addition to Melissa would be to integrate a STT like either Julius or CMU Sphinx to provide offline STT conversion for users. The results might not be as good as the Google Speech Recognition engine, so you can give users the choice to select a STT from the STTs you have available. They could choose between an offline STT or a more accurate STT.

By the time you read this, some of these functionalities may already have been constructed by contributors. However, you should still practice building these features on your own, because doing so will help you to achieve a greater understanding of the software. Feel free to discuss any new functionality that you think can make Melissa even better via GitHub issues.

Where Do I Use Melissa?

You may have the following thought: "Everything is cool, but except for R&D and on a laptop, where do I use Melissa?" Good question! Other than using Melissa on your laptop, there are a couple of sample use cases where I think Melissa can be helpful and make your devices and utilities more accessible and impressive.

Drones

Many people are building drones using Raspberry Pis and drone kits that are readily available in e-commerce stores. By connecting the motors and functionality to an Arduino board and then to a RPi, you can control the drone's movement, direction of flight, and so on using Melissa, your voice-controlled virtual assistant. You can start the drone simply by giving voice commands and tell it to fly, land, or follow you. The possibilities are limitless with a creative mind.

Humanoid Robots

Humanoid robots are being developed by big corporations as well as individuals. These autonomous robots use software like Melissa to make them more interactive and, well, human like. If you plan to build a humanoid robot, or any robot for that matter, you can integrate it with Melissa and build appropriate functionalities that extend Melissa to handle your robot.