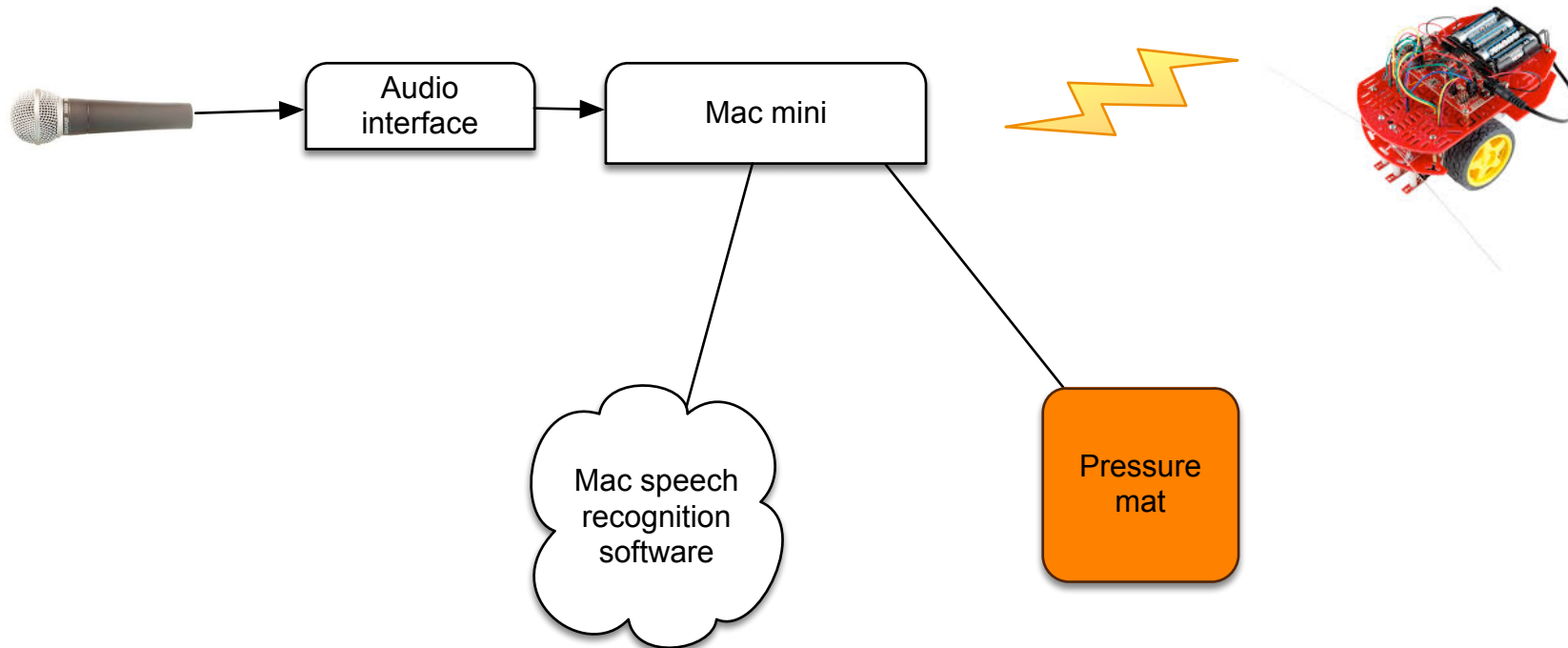


Overview

The process of controlling the robot is:

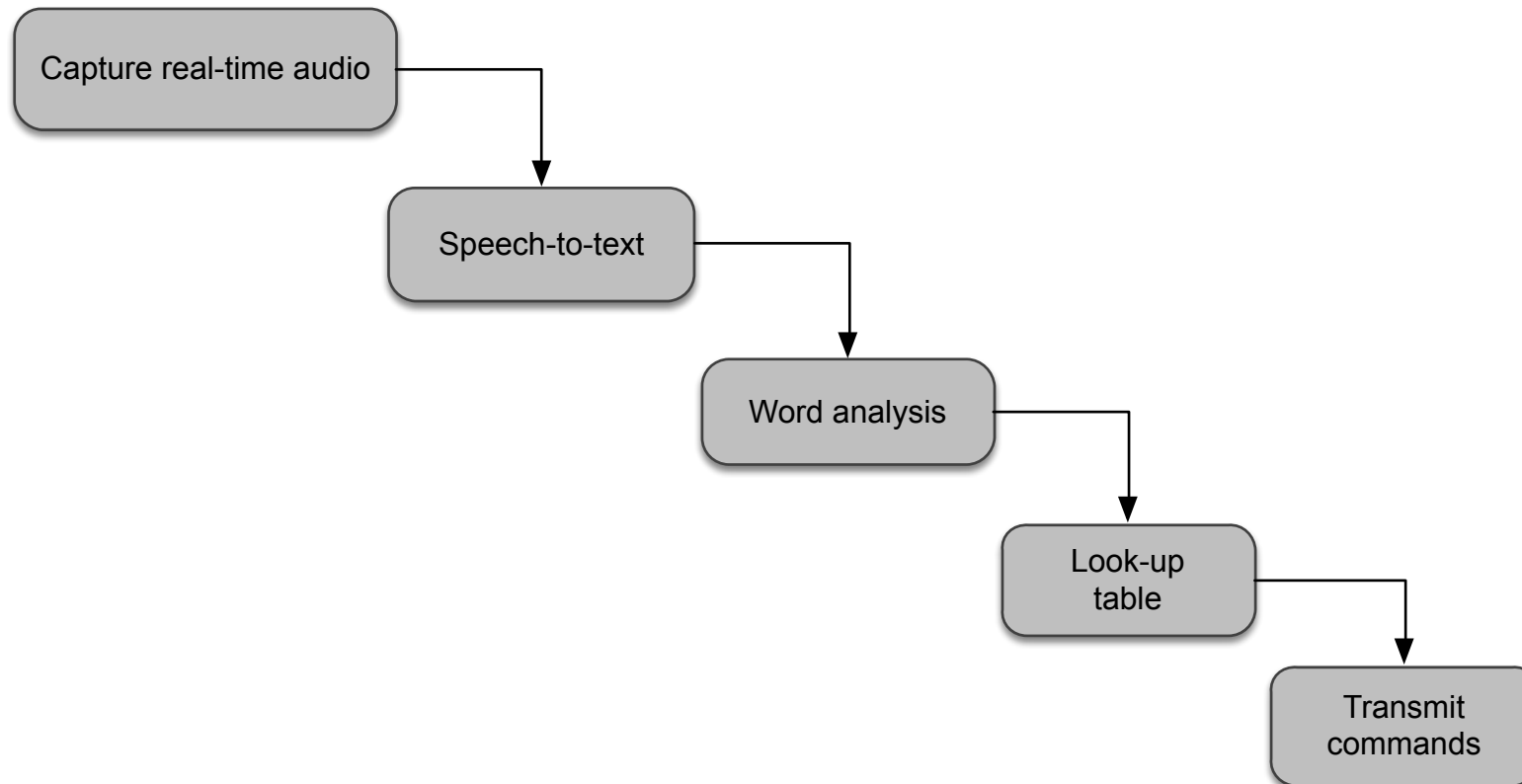
Analyse speech—> transmit commands to robot —> robot draws lines.



Process

How it works.

The Robot is controlled over an 868 Mhz serial data wireless link, from a custom app. written using Xojo. The app. hooks into the OSX speech recognition system to extract words as the user is reading the text. The words are analysed for alphabetical order and length, and these values are used as indexes into a command table. The command table stores the data that describes a robot movement, or set of movements. These are sent in real time to the robot and it moves and draws patterns. If the robot encounters a wall it moves away a random amount, and then carries on executing the commands.



User interaction

The user interacts with the robot in the following manner:

Standing on a pressure mat in front of the microphone cause the app. to start listening for speech input.

The app. makes a short beep when it is ready. As the user reads the text, the text appears in a field in the app. to show what is being read.

When the user steps off the mat, the app. stops the robot and stops listening for speech input.

