

ENGN 1931z Project

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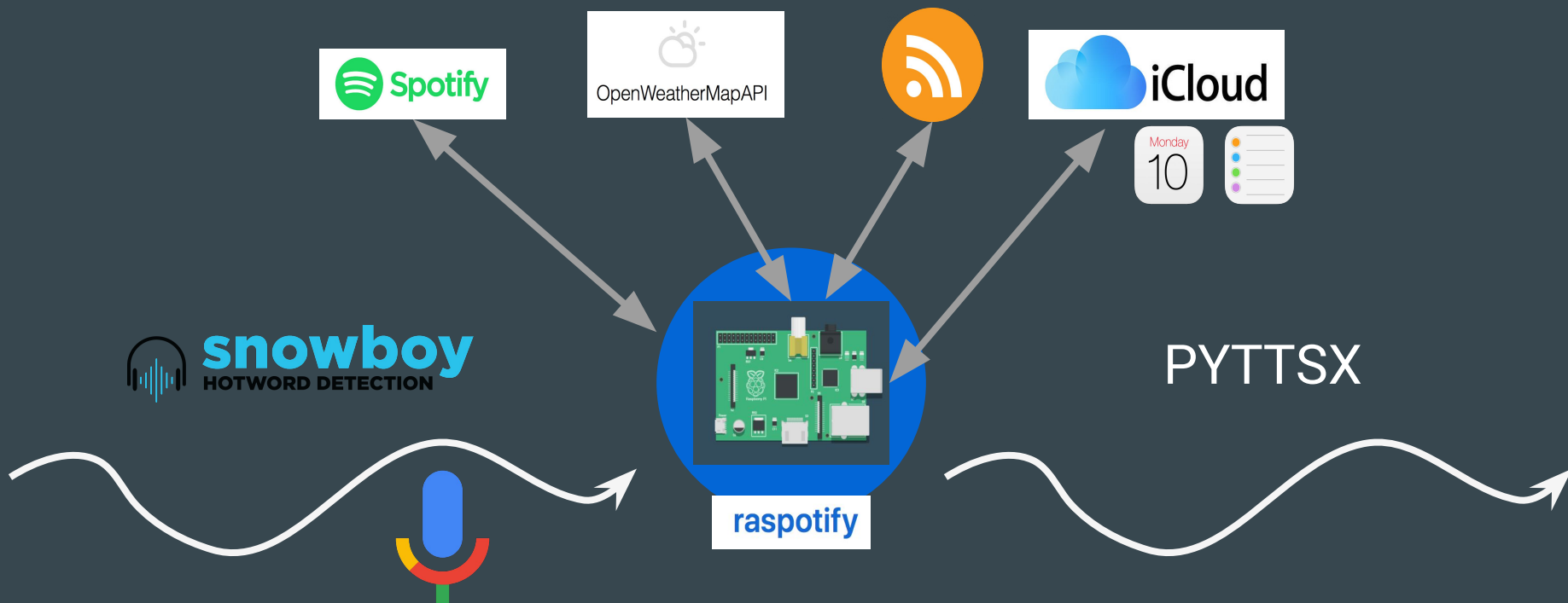
Goal

To build a voice assistant using a raspberry pi.

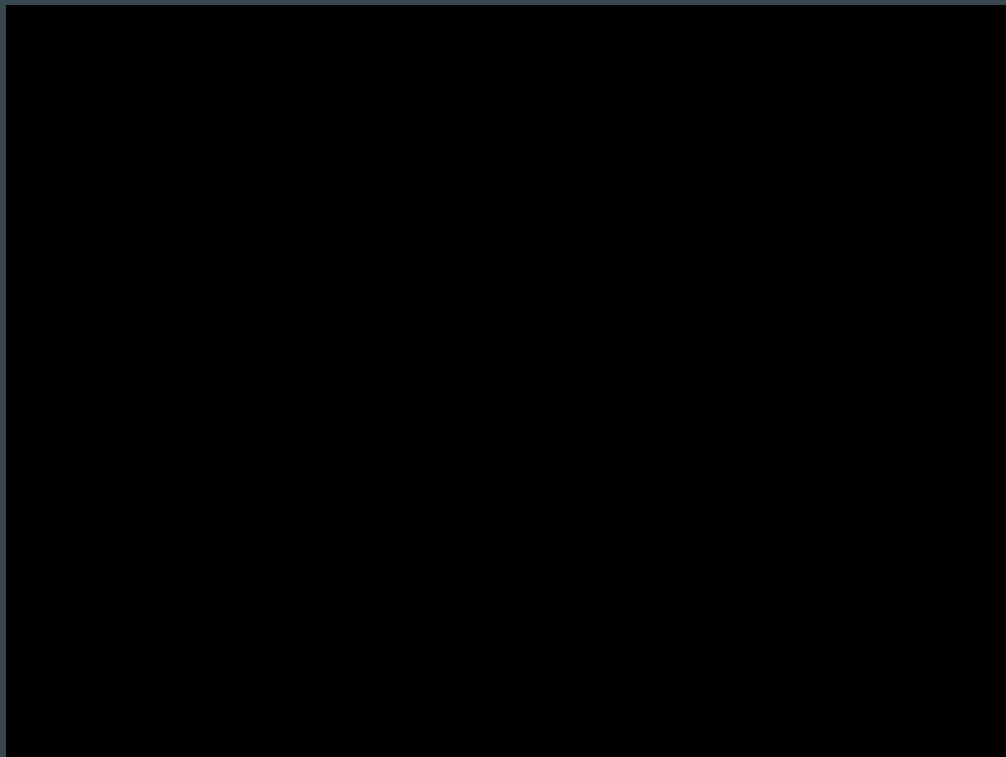
Features:

- Plays music from spotify
- Retrieve podcast rss audio feed and play it
- Integrates with iCloud calendar and reminders
- Tells weather
- Sets alarms

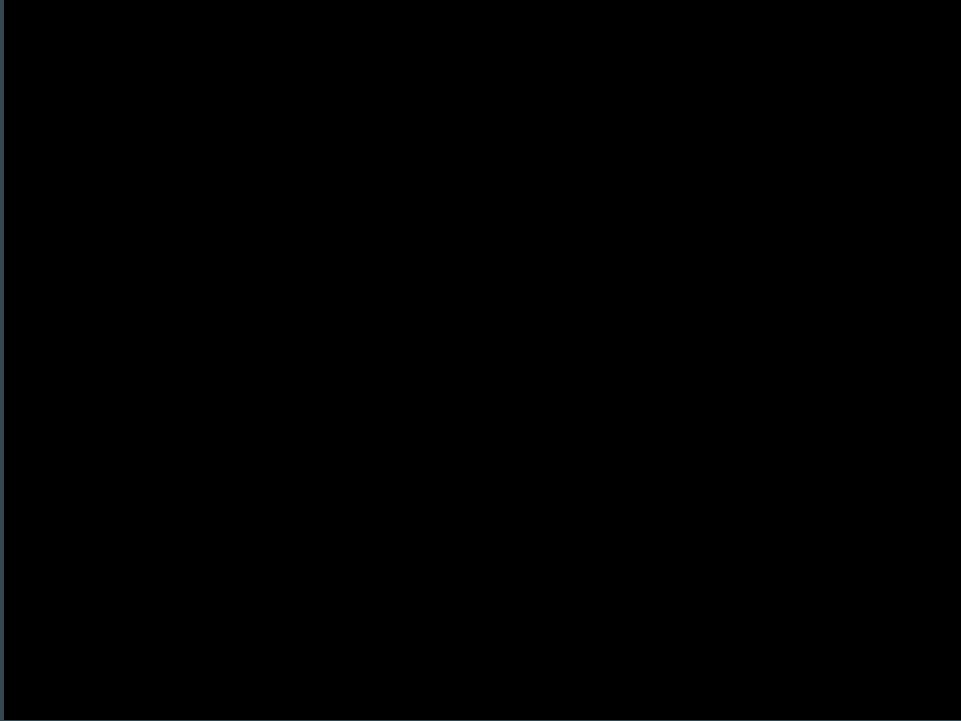
Diagram



Weather and Reminders Example



Spotify Example



Commands

“Play Spotify top 50”

“Play Spotify playlist <Playlist Name>”

“Spotify play”

“Spotify pause”

“Spotify next”

“Spotify previous”

“Spotify beginning”

“Spotify stop”

“Spotify shuffle”

“Play podcast the daily”

“Podcast pause”

“Podcast quit”

“iCloud make reminder <Reminder Text> (optional time day, hour, minute)”

“iCloud show events”

“Set alarm for <hour> <day>”

“What’s the weather”

“What’s the weather in <Insert City>”

Challenges

- Microphone range
 - Went through three different options (stock mic, small usb, larger usb mic)
- USB-Speaker
 - Pi does not automatically switch to usb-audio out
 - Can only play one sound at a time