

Milestone List, Timeline, and Effort Matrix
10/6/2020

Milestone List

Milestone (version)	Description	Delivery
v0.1.0	Hardware setup, CI/CD pipeline and frameworks setup	Week 2
v0.2.0	Server-client communication implemented	Week 4
v0.3.0	Basic commands implemented, server handles settings and resource management	Week 7
v1.0.0	SDK running	Week 10
v1.1.0	Advanced feature sets	Week 12

Timeline

Task #	Task	Start week	End week	Milestone
1	Research Raspberry Pi hardware	1	1	v0.1.0
2	Research Python text-to-speech libraries	1	2	v0.1.0
3	Research Python speech-to-text libraries	1	2	v0.1.0
4	Research natural language processing libraries/frameworks	1	2	v0.1.0
5	Research Alexa Skill SDK for design inspiration	7	8	v1.0.0
6	Create terminology for system elements	2	4	v0.2.0
7	Implement client speech to text	2	4	v0.3.0

8	Implement wake word detection	2	4	v0.3.0
9	Implement basic client text to speech	2	4	v0.3.0
10	Implement basic server-client communication channel	2	4	v0.2.0
11	Implement basic natural language processing for server intent detection	3	7	v0.3.0
12	Implement basic app SDK	7	10	v0.3.0
13	Implement system reserved commands	4	7	v0.3.0
14	Implement app permissions for system resources	7	9	v0.3.0
15	Implement system interrupt handlers for apps	8	10	v0.3.0
16	Set up tests and CI/CD pipeline for github repo	1	1	v0.1.0
17	Build app for common utilities	9	11	v1.1.0
18	Build app for weather	10	11	v1.1.0
19	Build app for Spotify	10	12	v1.1.0
20	Create documentation for SafeAssistant SDK	11	12	v1.0.0

Effort Matrix

