Project Plan: Raspberry Pi Indy Agent

Goals

Build an Indy agent running on raspberry pi that can interact with other agents and have easy access to GPIO pins.

Deliverables

- Raspbian Indy Agent repo that passes Indy Agent test suite allowing reads/writes of GPIO pins
- Image of Raspbian-Indy-Agent for easy deployment onto Raspberry Pi
- Documentation of Raspbian-Indy-Agent detailed enough for replication
- Example code and demo using Raspbian indy agent
- Hyperledger Aries RFC on how to interact with senseHat
- Video on youtube presenting the project

Mentee Name and Contact Info

ZIXUAN ZENG
zixzeng@gmail.com
Rocketchat id: zxx02

Milestones

☑️ Project kickoff, communication on the project, setting up communication channels ZIXUAN ZENG Adam Burdett 03 Jun 2019
☐ Week 1 07 Jun 2019
  ☑ Select and order hardware for the project. ZIXUAN ZENG
  ☑ Install an operating system image (Raspbian OS) on Raspberry pi ZIXUAN ZENG
  ☑ Onboarding with Indy project ZIXUAN ZENG
☐ Week 2 14 Jun 2019
  ☐ Made pi connected
  ☑ Public accessible via ngrok
  ☐ Public accessible via beame-inst-ssl
  ☑ Be familiar with coding GPIO on Raspberry pi
    ☑ Displaying text, single character, color, images
    ☑ Temperature, pressure, humidity sensor
    ☑ Movement detection
    ☑ Joystick pressing detection
  ☑ Built Indy reference agent on PC.
  ☐ Post the project plan for Raspberry Pi Indy Agent Adam Burdett ZIXUAN ZENG
☐ Week 3 (report) 21 Jun 2019
  ☑ Indy agent software on raspberry pi selected
  ☑ Building indy-sdk on rasbberry pi
☐ Week 4 28 Jun 2019
  ☑ Indy sdk build on raspberry pi
  ☑ Try to run demo with Monty headless on pi.
  ☑ Running python agent on pi
  ☑ systemd configuration start
☐ Week 6 Half (report) 12 Jul 2019
  ☑ Make Python agent run on pi and can interact with other agents
  ☑ Demo of python agent running on raspberry pi interacting with other agents and ledger?
☐ Week 7 19 Jul 2019
Aries RFC on the way interacting with senseHat, started discussion

- Make Aries Cloud Agent run on pi
- Making the raspberry pi image creation script

**Week 8** 26 Jul 2019
- Coding new module for agent
- Start documentation

**Week 9** 02 Aug 2019
- Debugging new module
- Code review from the community

**Week 10** 09 Aug 2019
- Documenting project
- New module pull request

**Week 11** 16 Aug 2019
- Documenting project
- Deliver image for raspberry pi indy agent
- Repo for the project

**Week 12** 23 Aug 2019
- Video demo recording the project for presentation

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### Accomplishments

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<tr>
<th>Description</th>
<th>Due date</th>
<th>Assignee</th>
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### Summary Report

**Slides:**


Demo video:

(To upload)