Amazon - IR Blaster

CSE 115B, Winter 2020
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Sprint 1 Plan

Amazon - IR Blaster, (2/24/20 - 3/6/20)

Goal:

- Build a device that can receive and transmit an IR signal
- Build a simple Alexa Skill

Task listing, organized by user story:

Sprint 1 (Total Points: 55):

SPIKE Alexa Skills: Understand how Alexa Voice Services communicates with Alexa cloud and how it all ties into making an Alexa skill.

SPIKE IR: Understand how to read and write to IR Transceiver shield pins on the RPi.

User Story #1 (21 points)**:** As a developer, I want to be able to transmit and receive specific IR frequencies through the Raspberry Pi's IR module.
Tasks: [Initial Assignments: Peter and Nikhil]

- (6 Points): Setup the Pi IR transceiver expansion board
- (4 Points): Run LIRC on the Raspberry Pi
- (8 Points): Receive and decode a remote control IR signal
- (3 Points): Transmit the decoded signal on the transceiver

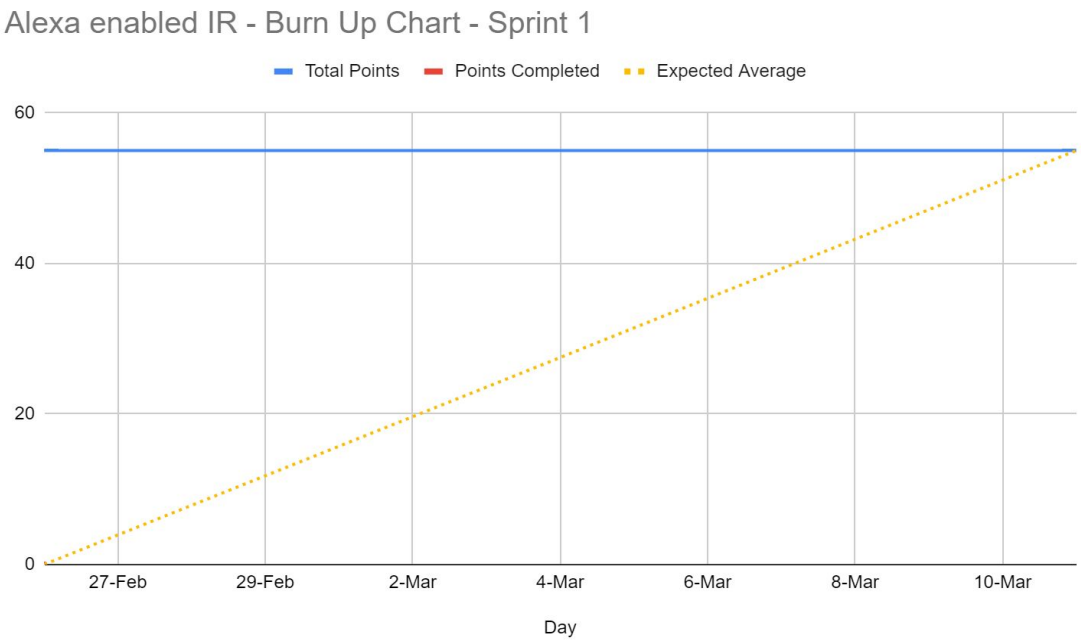
User Story #2 (34 points)**:** As a developer, I want to be able to build a basic Alexa Skill to test the communication between the Raspberry Pi hardware and the Alexa cloud.
Tasks: [Initial Assignments: Nixon, Vincent, and Tongze]

- (12 Points): Create a basic Alexa Skill
- (10 Points): Link the skill to Alexa cloud
- (12 Points): Test communication between hardware and cloud

Team Roles:

Nixon Duong - Product Owner, Developer
Nikhil Punathil - Scrum Master, Developer
Peter Eskraus - Developer
Tongze Wang - Developer
Vincent Thai - Developer

Initial Burnup Chart:



Initial SCRUM Board: