

Amazon - IR Blaster

CSE 115B, Winter 2020

Nixon Duong, Nikhil Punathil, Peter Eskraus, Tongze Wang, Vincent Thai

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

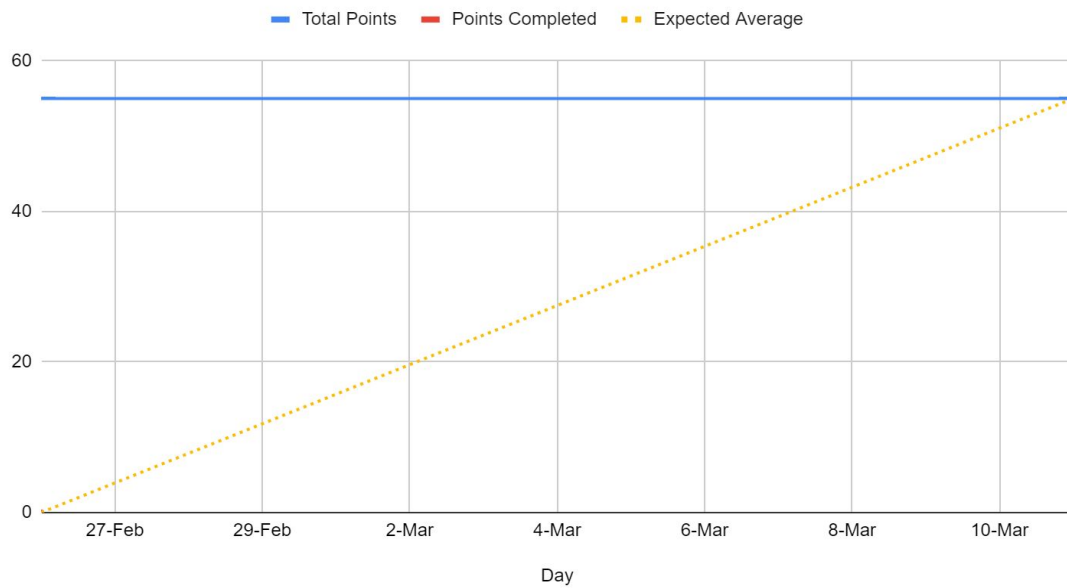
Peter Eskraus - Developer

Tongze Wang - Developer

Vincent Thai - Developer

Initial Burnup Chart:

Alexa enabled IR - Burn Up Chart - Sprint 1



Initial SCRUM Board:

The screenshot shows a Trello board titled 'IR Blaster Scrum: Sprint 1'. The board is organized into four columns: 'User Stories', 'Tasks', 'In Progress', and 'Review/ Test'. The 'User Stories' column contains two cards: '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.' and '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.' The 'Tasks' column contains six cards: '(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', '(12 Points): Create a basic Alexa Skill', and '(10 Points): Link the skill to Alexa cloud'. The 'In Progress' column is currently empty. The 'Review/ Test' column is also empty. The board is set to 'Private' and is managed by 'Butler'.