

Release Plan

SEADS Microgrid Project - Backend/DB

Release Name: Sprint 2

Release Date: December 12, 2014

Revision Number: 1

Revision Date: Monday November 03, 2014

High Level Goals

1. **Sprint 1**

- a. Database software selection and schema migration, replicate existing MySQL functionality.
- b. Appliance data signature collection and familiarization with current database implementation.

2. **Sprint 2**

- a. Finish implementing API and data landing zone.
- b. Implement a process to create data signatures from raw data.

3. **Sprint 3**

- a. Add the ability to search by signatures.

Sprint 2 Goals

1. Reimplement schema in new database.
2. Reimplement data endpoint in a concurrent socket server written in Go for the new database.
3. Write Python API to provide better data retrieval for the GUI developers.
4. Creating unique data signatures.

Sprint 1 User Stories

As a GUI developer, I want to query the database for signals within a certain range.

Sprint 2 User Stories

As a GUI developer, I want to query the database for signals within a certain range.

As a search developer, I want to create unique signatures for signals to store in a database.

Sprint 3 User Stories

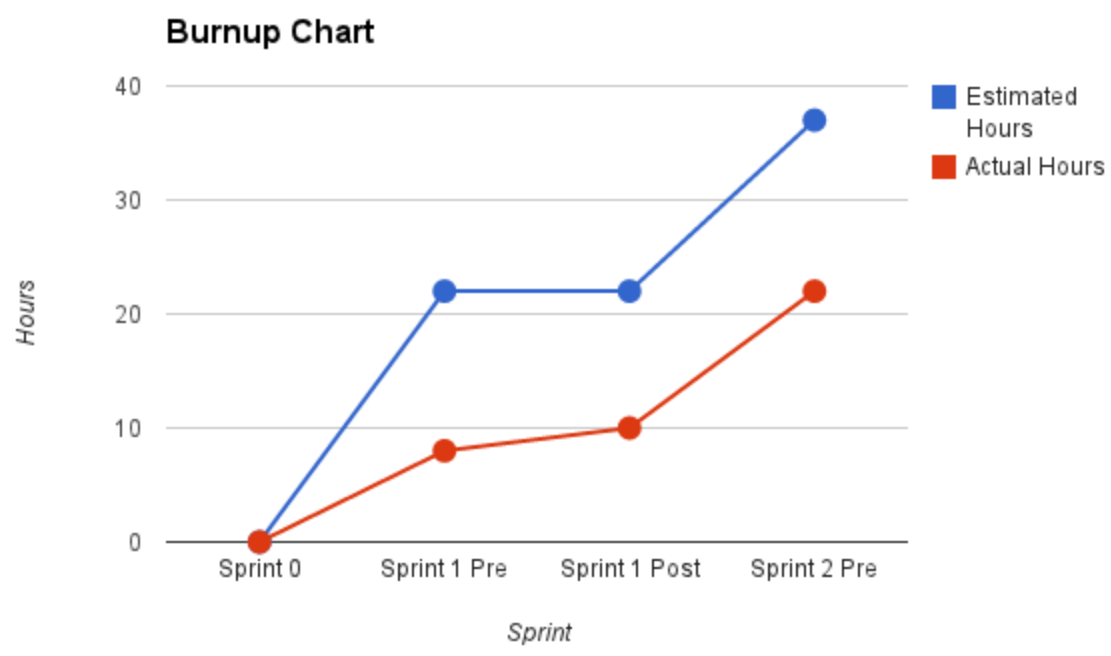
As a GUI developer, I want to query the database for data by appliance type.

User Stories for Release

Sprint	User story	Story points
1	As a GUI developer, I want to query the database for signals within a certain range.	21
2	As a GUI developer, I want to query the database for signals within a certain range.	21
3	As a GUI developer, I want to query the database for data by appliance type.	13

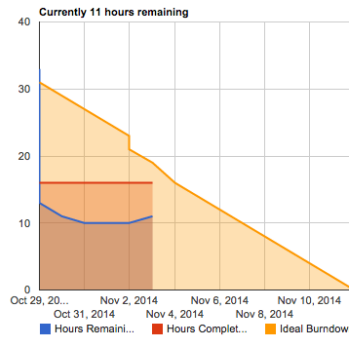
Product Backlog

1. Caching server to speed up queries.
2. Change database schema to not store every different type of data in the same column.
3. Rewrite SEAD plug firmware
4. Create algorithm to create data signature from raw data.



Scrum

Burndown Chart



Summary stats

Total Cards:	37
Remaining Cards:	18
Done Cards:	19
Percent of cards done:	51%
Hours at start:	33 (edit)
Hours est total:	39
Hours remaining:	11
Hours done:	16
Percent of hours done:	71%
Days Elapsed	5
Workdays Elapsed	6
Daily Burndown	2.67
Est. Workdays Left	4
Est. Completion Date	11/07/14

Date-range for the sprint: 2014-10-29 to 2014-11-12

Hours Est. Spent

0	0	Create preliminary technique for storing data signatures
0	0	find useful libraries
0	0	parse the data
0	0	mean power spectrum and standard deviation
0	0	find peaks & associated standard deviations for frequency and amplitude
0	0	implement algorithm
0	0	picture
0	0	1. reliably identify single devices
0	0	2. reliably identify single, unknown devices
0	0	3. reliably identify multiple devices plugged into a (say, power strip) at different times
0	0	4? reliably identify multiple devices started simultaneously (reach)
0	0	Collect device data
0	0	Scrum With Grace
0	0	Pick up PC1000 from Ali
0	0	MySQL enable file write.

Full scrum board at [http://www.sead.systems/wiki/index.php/DB
Trello Scrum Board](http://www.sead.systems/wiki/index.php/DB_Trello_Scrum_Board)