SPSU

Forager

Group 4: Product Demo

Matthew Powell

Robin Mays

Samuel Lee

Thomas Couture

SOUTHERN POLYTECHNIC STATE UNIVERSITY

Project Forger

Group4 is the producer of the website analysis tool Forager. Forager will allow a systems administrator or webmaster to easily scan their site for broken links and missing resources, then offering an easy way to generate and compare reports.

Forager is user friendly and portable. Users are provided access to reports and scanning tools through a website produced using common web standards. This means that Forager is accessible from any PC, laptop, tablet, or mobile device regardless of the client OS.

Requirements

-PHP5

-Python 3

-HTML

-PostgreSQL

- Apache 2.2 webserver

Use Cases In Cycle 1

ID: Crawler-1: This is the web crawler that takes and processes webpages.

ID: Crawler-2: This is used to send the results of Crawler-1

Use Cases In Cycle 1

ID:Report-1: This is the basic UI command that is responsible for starting the web crawler.

ID:Report-2: This is the UI front for viewing reports.

ID:Login: This is a login page implemented for safety reasons.

Assignments Cycle 1

Individual Assignments

Matthew Powell – Use case Crawler-2, Test plan, Documentation

Robin Mays – Use case Report-1&2, UI, Documentation

Thomas Couture –Use case Report-1&2, UI, Documentation

Samuel Hall – Use case Crawler-1,Login, Documentation

Planned Use Cases for Cycle 2

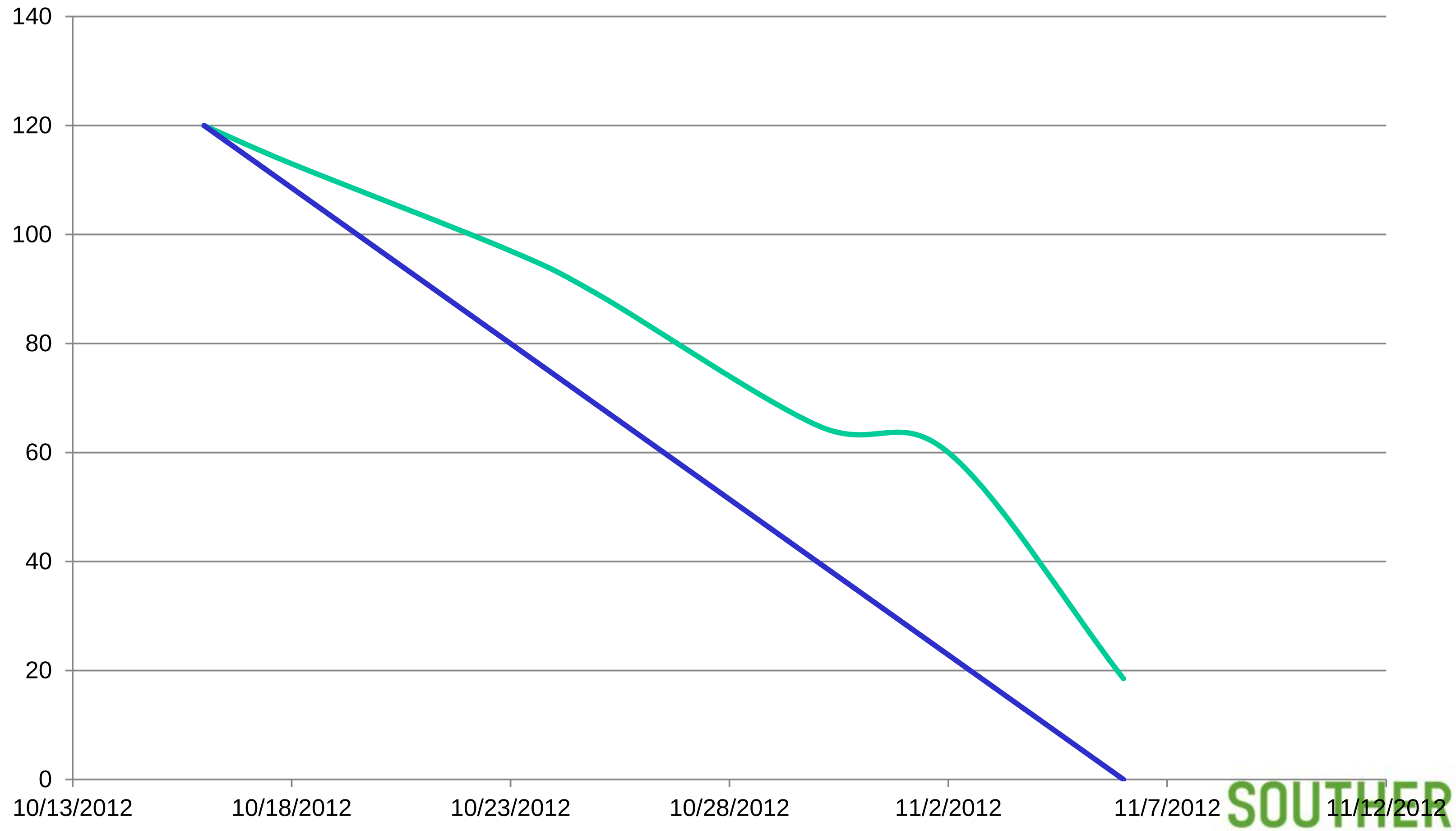
Report-3,4,5,6,7

Crawler-3,4,5,6,7

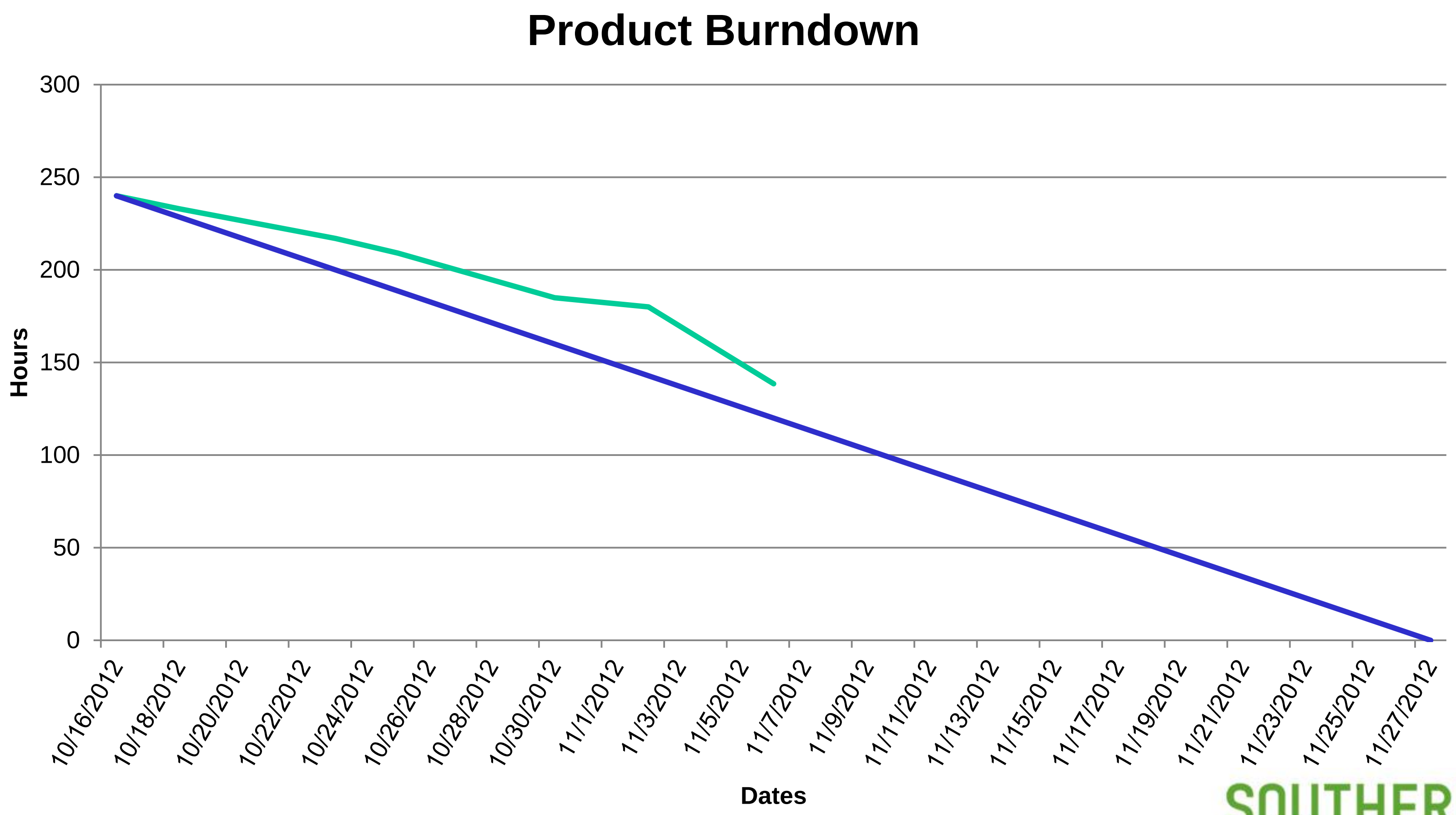
Risk Mitigation

1	**We might have issues with SSL support in our HTTP Request library. As previous projects have had issues with this, the likelihood of some impact is fairly high, but the impact is relatively low as the user story is a low priority.**	**This can be mitigated by research. Appropriate design modularity should also allow us to swap out the Request library without much trouble if we run into problems.**
2	We could have communications problems with the report viewer and the web crawler. As they are written in different languages and running as completely distinct processes, we could potentially run into problems moving data between them. This is a relatively low likelihood, as database communication in python and php are both well-trodden ground, but the impact would be severe.	A backup plan might be to use python to generate JSON directly from pickled object from the web-crawler, or potentially generate one shot reports directly in the web-crawler, though these options are both less flexible.
3	We could have integration problems between the web crawler and the web interface. Other projects have had issues communicating between the two pieces, and being able to start the webcrawler from the web interface is a high priority.	Research is again a key defense against this failure, as these problems have certainly been widely encountered. Richard W. Stevens's Advanced Programming in a Unix Environment, while written in C, covers many of the pitfalls of IPC and daemonized processes in this environment, and careful reading should produce solutions to the most common problems which can be adapted for the languages in question.
4	We could have concurrency problems with the asynchronous communication between the web crawler and the web interface. This seems like a very low risk proposition, as updates only come from one process and receiving data that is a few seconds stale does not have any user impact.	This can be ignored.

Sprint Burndown



Product Burndown



Post Mortem Successes

-Creation of a functional web crawler

-Implementation of basic UI functions and report viewing

-As a bonus, some sorting features were implemented

- Reports are searchable

Post Mortem Failures

- Time management for Requirements
- Lack of a stop function on web crawler
- Problems viewing report data

Post Mortem Mitigation

- -Better time management including but not limited to more face to face meetings and more extensive use of Git hub for documents.
- -With less time spent “wasted”,we free up more time for progress in development allowing more time to complete other features.

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