

CLOUD NATIVE SECURITY SOLUTION

CS-C2130 Project Review 1
Team 4

AGENDA

- Introduction
- Project results
 - Sprint results
 - Product backlog
 - Demo
- Project status
 - Software quality
 - Spent effort
 - Sprint retrospectives

INTRODUCTION

THE PROBLEM

- Providing security in the cloud
- The limited reach of endpoint protection
- Gaining access where the data moves and malicious files spread

THE SOLUTION

CLOUD GUARD

IN PRACTICE

- Access the user's data in a cloud service
 - Analyze with F-Secure's pre-existing services
 - Visualize the results and take action
-
- For F-Secure: Something valuable to productize and develop further

PROJECT RESULTS

SPRINT 0

PREPARATIONS FOR FIRST IMPLEMENTATION

	Story	Points
	Prototype, test and select frontend technologies	40
	Learn to use Security Cloud APIs	13
	Evaluate target cloud services	8
	Learn to use OAuth	8
	Decide and Document Development Processes	5
	Craft a definition of done	2
	Craft a product vision	5
	Total	81



SPRINT 1

MVP PROTOTYPING

	Story	Points
	Interface for selecting storage provider with oauth flow and selecting one file	40
	Architect MVP	13
	Press release	13
	Try extensions in original interface	8
	Leftover tasks & adjustments	5
	Total	79



SELECT PROVIDER

Choose cloud storage

Cloud selection

Dropbox

Go

OAUTH



cnss would like access to the files and folders in your
Dropbox. [Learn more](#)

Cancel

Allow

RESULTS

#	Filename	Reputation	Prevalence	Hash
1	File A	150	1	

SPRINT 2

USER INTERFACE

	Story	Points
	Design and implement user interface	40
	Project Review	20
	Support for analyzing all files in the storage	8
	Investigate how to install and use webhooks	5
	Create a webpage for the project	5
	Design an architecture that fills the requirements for the press release and webhooks	5
	Total	83



COMING NEXT

- Optimizations
- Integrate more F-Secure services
 - Sending URLs
- Backend
 - Scheduled scans
 - Webhooks

A low-angle, upward-looking perspective of several modern skyscrapers. The buildings are constructed with light-colored facades and feature prominent glass windows. The perspective creates a strong sense of height and architectural scale, with the buildings converging towards the top of the frame. The sky is a pale, clear blue.

DEMO

Dropbox

Interrupt

27 / 37
scanned
0
excluded

Results

We found 3 problems.

Suspicious Files

? /PUA.bin

Infected Files

✖ /Eicar.zip
✖ /PUA-Malware-apk.bin

backup.zip

EICAR.txt

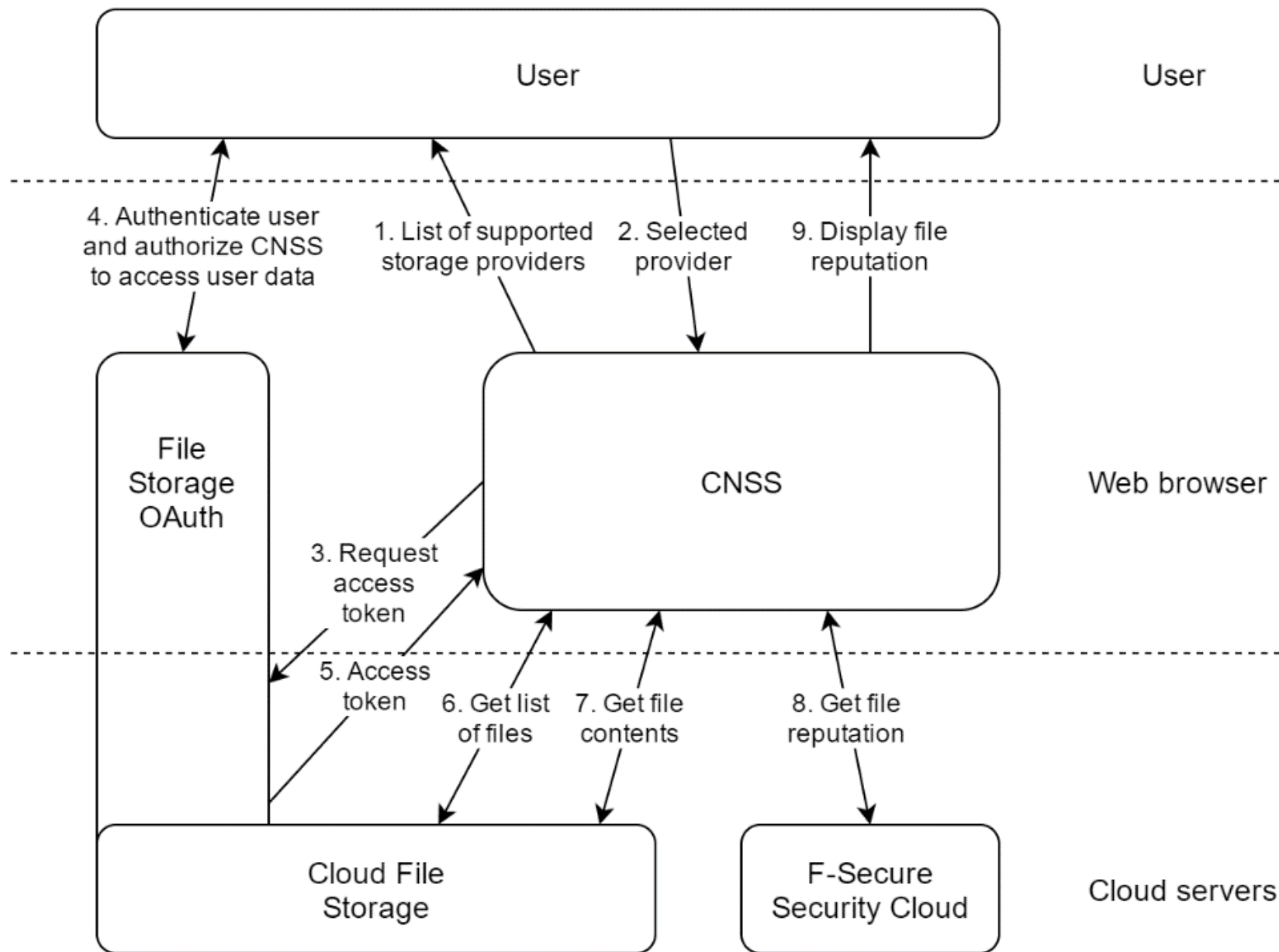
clean-cylance-clean-2150f28df66e48d94d7fcf247ee797a7170f19cd.upstream

clean-cylance-suspicious-pdf-f15df7f5d16f82f79fea820c006d802bc6628381.upstream

Eicar.zip

PUA-Malware-apk.bin

PUA.bin



PROJECT STATUS

SOFTWARE QUALITY

- Usability
 - Intuitive and easy to use
- Compatibility
 - Works on all major browsers
 - Can be used on mobile
- Extensibility
 - Add new cloud services
 - Add new F-Secure services

DEFINITION OF DONE

Story DoD

- Artifacts produced, reviewed and checked in
- Readable code
- Changes documented
- Tests written and passing
 - Statement coverage at least 75 %

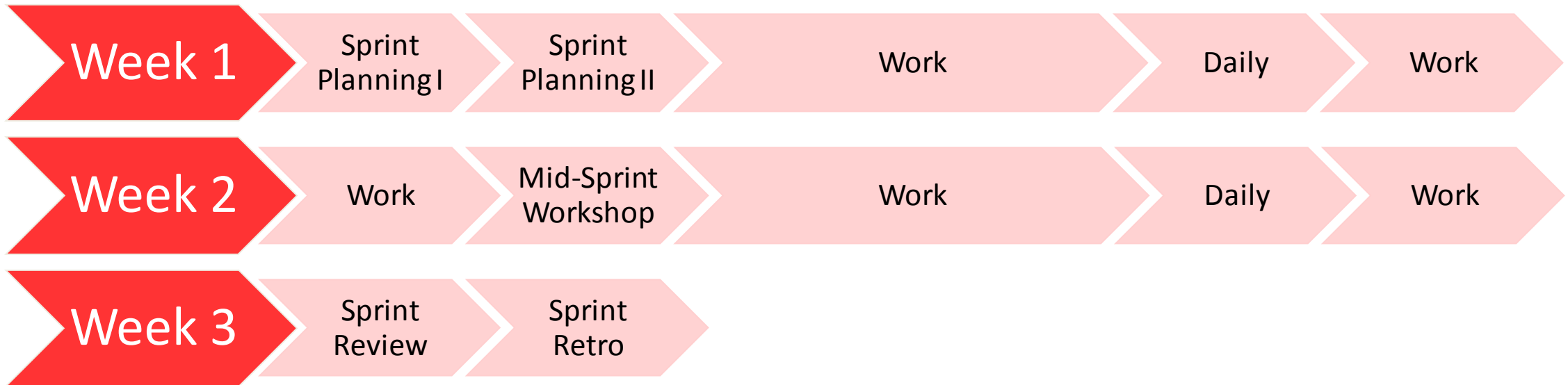
Sprint DoD

- Stories demonstrated to the client
- Backlog updated

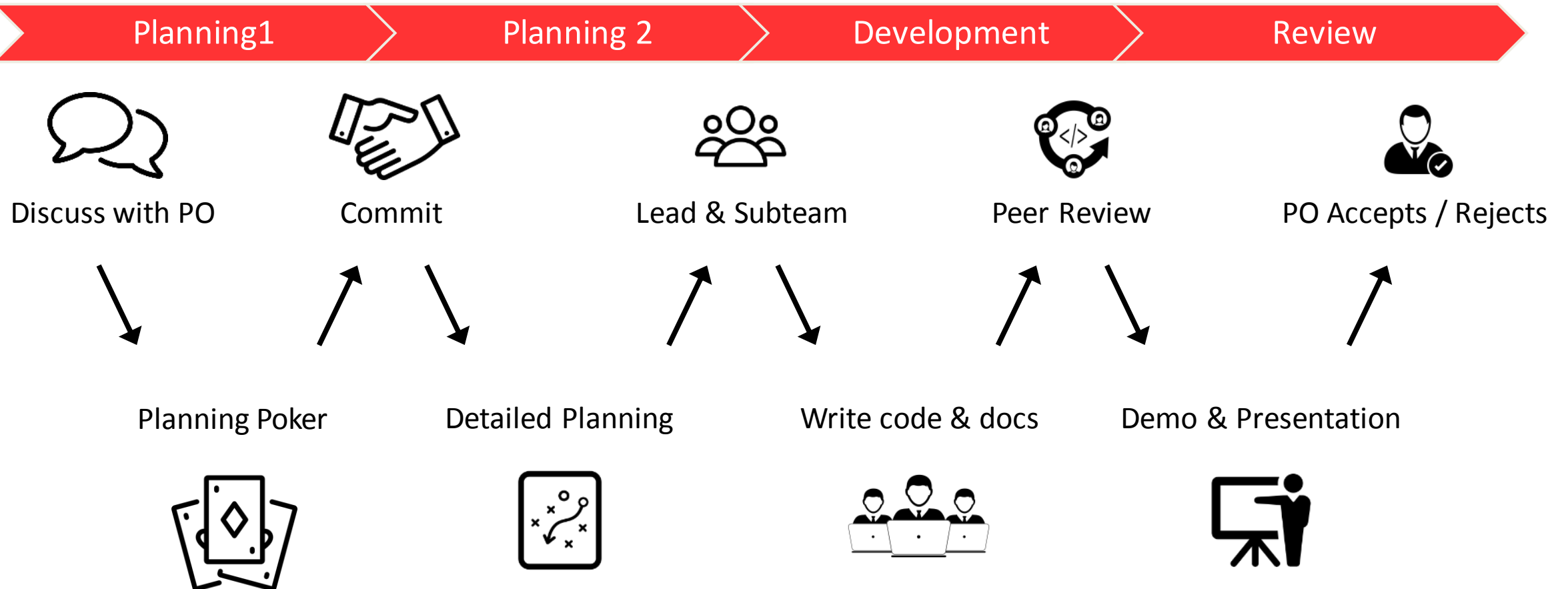
QUALITY ASSURANCE PRACTICES

- Peer Review
 - Code and documentation reviewed by two developers
- Continuous integration with GitLab CI
 - Builds and tests all merge requests
 - Enforces consistent coding style
- Manual testing

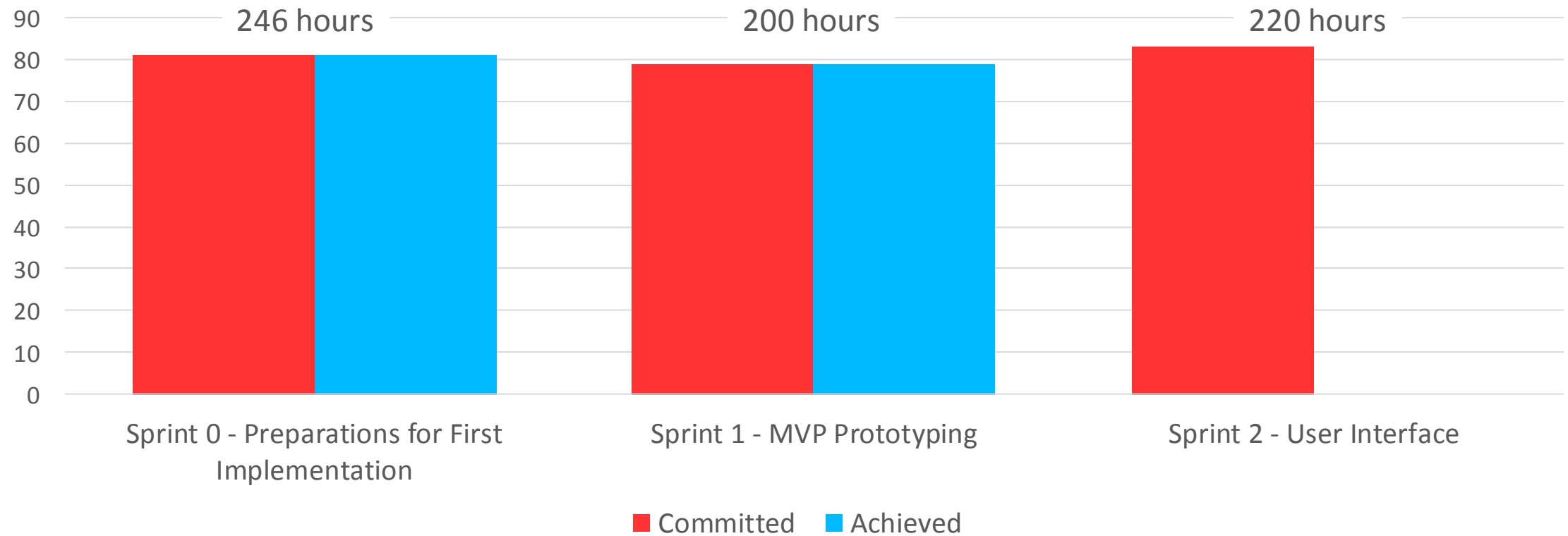
SPRINT EVENTS



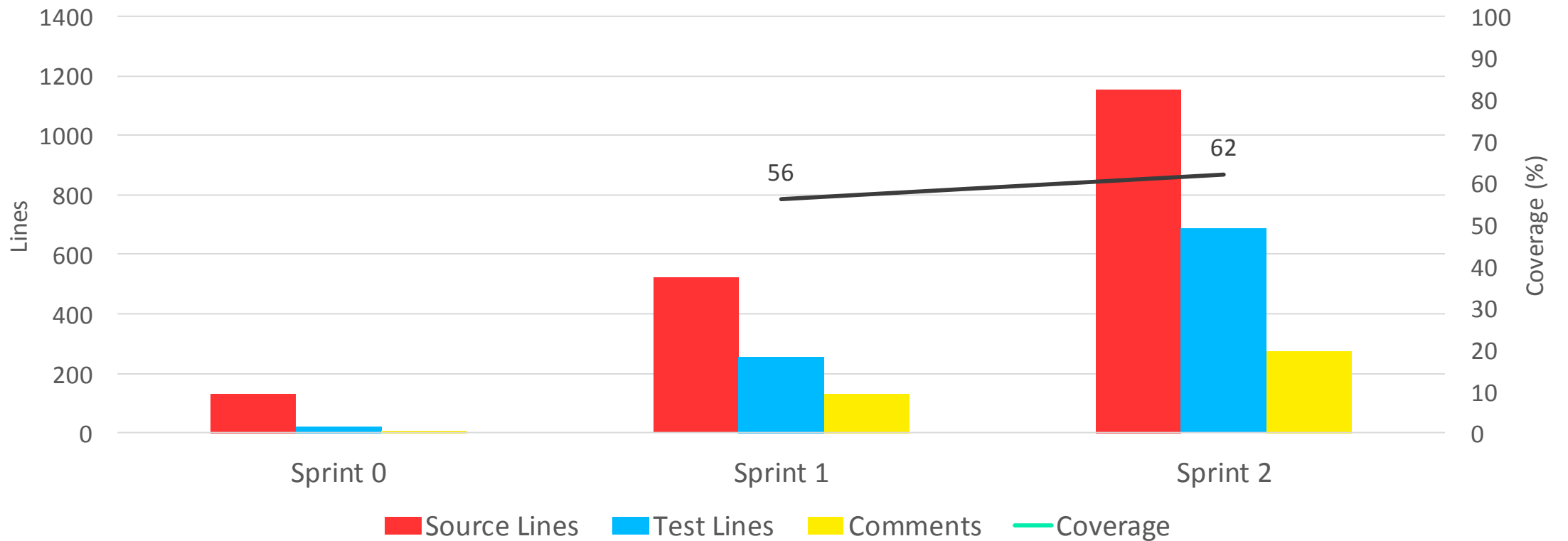
STORY FLOW



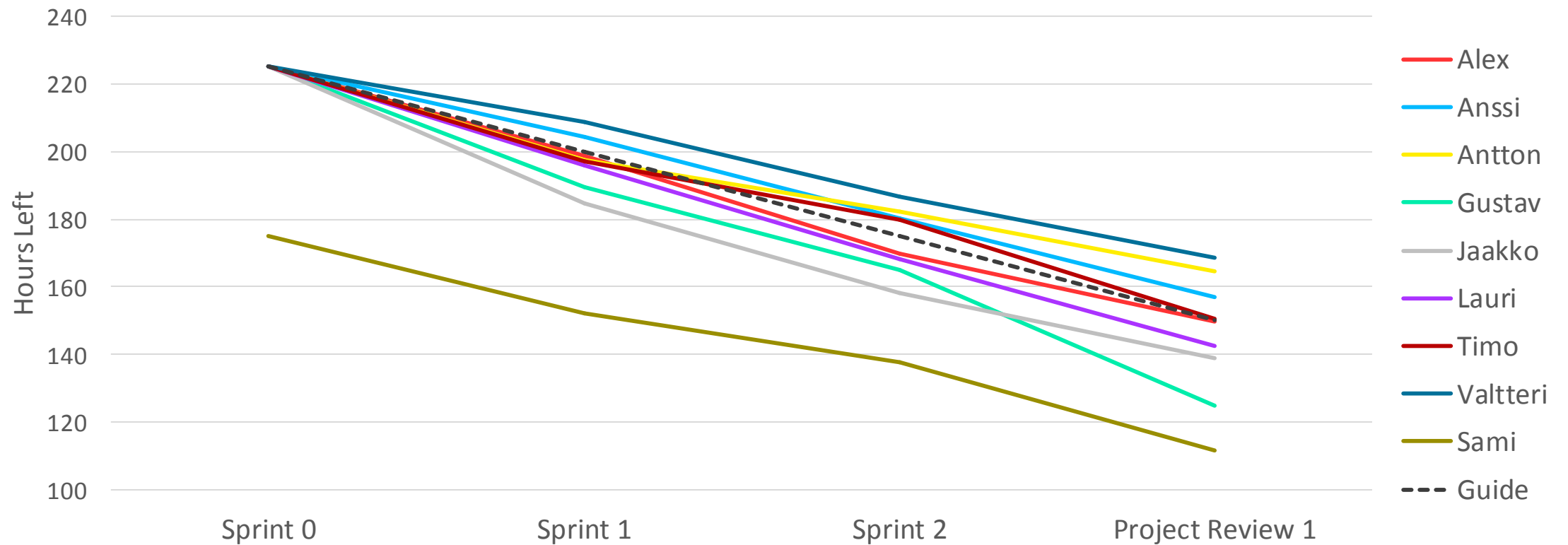
VELOCITY



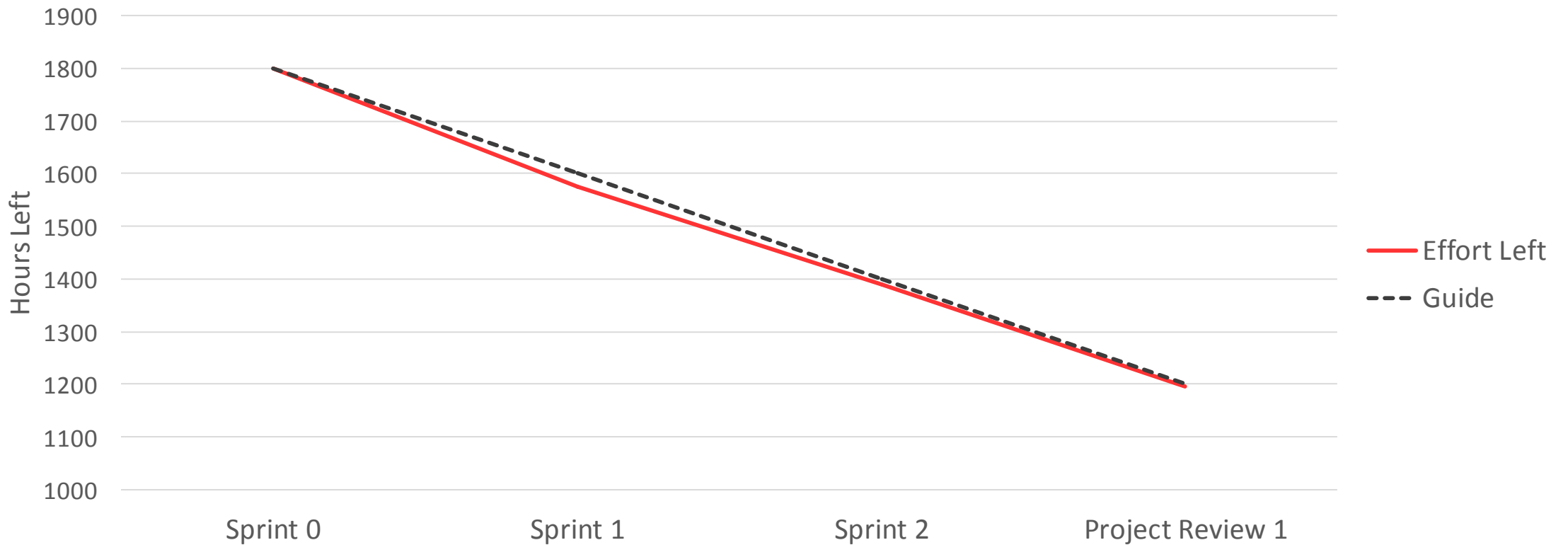
DEVELOPMENT METRICS



EFFORT BURNDOWN



TEAM EFFORT BURNDOWN



RETROSPECTIVES

SPRINT 0

Problems

- Lack of communication
- Lack of initiative
- Sprint demo not good enough

Actions

- Update tasks in Agilefant
- Story leads & small tasks
- More planning for the demo

SPRINT 1

Problems

- Slow start
- Slow peer reviews
- Integrating work of others

Actions

- Mid-sprint goals
- Assign reviewers from subteam
- Separate branch with relaxed requirements
- Understand dependencies through more planning

POSITIVE OBSERVATIONS

- Tuesday information sharing meetings
 - Knowledge sharing
 - Discuss problems
 - Clarify ideas, continue planning
- Writing a press release
 - Clarified the purpose
- Progress on the process
 - Reacting to issues
 - Changing practices
- Sprint goals achieved
 - Realistic commitments