

Process Overview

Neronet

*Toolbox for managing the training
neural networks*

CSE-C2610
Software Project

Aalto University

December 21, 2015

Outline

Schedule Plans

Recurring events Overview Events

Practices Overview Information

Process Overview

Neronet

Schedule

Plans

Recurring events

Overview Events

Practices

Overview Information

Outline

Schedule Plans

Recurring events

Practices

Process Overview

Neronet

Schedule

Plans

Recurring events

Overview
Events

Practices

Overview
Information

S	Start	End	D	Sa	Te	Tu	Jo	Ju	li	Ma
0	19.10.	13.11.	25	50	35	35	35	35	35	35
1	13.11.	4.12.	21	30	33	33	33	33	33	33
2	4.12.	13.1.	38	30	33	33	33	33	33	33
3	13.1.	1.2.	21	15	33	33	33	33	33	33
4	1.2.	29.2.	28	15	33	33	33	33	33	33
5	29.2.	21.3.	21	15	33	33	33	33	33	33
6	21.3.	11.4.	21	20	25	25	25	25	25	25

Note

- ▶ S2 includes exams (7.-18.12.) and holidays (23.12.-1.1.)
- ▶ S4 includes exams (15.-19.2.)
- ▶ S6 includes exams (4.-9.4) and is reserved for mainly polishing & documenting for final review (11.-13.4.)

Events

Process Overview

Neronet

Schedule

Plans

Recurring events

Overview
Events

Practices

Overview
Information

Time	Event	Participants
30.10. 16-18	Project kickoff	team + PO
13.11. 15-17	Sprint 0 demo	team + Coach
16.11. 11-13	Sprint 1 planning	team + PO
04.12. 16-17	Progress review 1	team + PO + Coach
04.12. 17-18	Sprint change 1	team + PO
13.01. 19-20	Sprint change 2	team + PO
01.02. 14-16	Sprint change 3	team + PO

All events, locations, agendas and other details are up to date in [Google Calendar](#).

Outline

Schedule
Plans

Recurring events
Overview
Events

Practices

Process Overview

Neronet

Schedule

Plans

Recurring events

Overview
Events

Practices

Overview
Information

Overview

Recurring events:

- ▶ Sprint planning
- ▶ Sprint review
- ▶ Sprint retrospective
- ▶ *Daily* scrums
- ▶ Teamwork sessions

Process Overview

Neronet

Schedule

Plans

Recurring events

Overview

Events

Practices

Overview

Information

Sprint planning

A sprint planning session is organized at the start of each sprint.

1. Before the session

- ▶ the PO makes sure the **product backlog** contains an ordered list of items with a description and a number depicting business value
- ▶ the team plays planning poker to define effort estimates (**story points**) for each BI

2. During it the team and the PO

- ▶ briefly define the increment's purpose, the **sprint goal**
- ▶ move BIs from the product backlog to the **sprint backlog**

3. After it, the team

- ▶ chews the BIs into **smaller tasks**
- ▶ assigns effort estimates on the tasks by **planning poker**
- ▶ assigns a **developer and a reviewer** to each task

Sprint review

At the end of each sprint, we

- ▶ demonstrate the stories we were able to get *done*
- ▶ adapt the product backlog based on the results, if needed

Process Overview

Neronet

Schedule

Plans

Recurring events

Overview

Events

Practices

Overview

Information

Sprint retrospective

Process Overview

Neronet

Schedule

Plans

Recurring events

Overview

Events

Practices

Overview

Information

After the sprint review, we

- ▶ evaluate and rank teamwork practices
- ▶ discuss how teamwork could be improved
- ▶ remove/replace any bad practices
- ▶ plan implementation of new improvements
- ▶ give feedback to sprint team leader

Daily scrums

On Wednesdays and Fridays we have a scrum in which everyone quickly explains what

- ▶ they did since last Scrum
- ▶ problems they have encountered
- ▶ they plan to do before the next Scrum

Work plans are adjusted depending on input.

Process Overview

Neronet

Schedule

Plans

Recurring events

Overview

Events

Practices

Overview

Information

Teamwork sessions

Most weeks, we'll

- ▶ have a Scrum and a 6h session on Wednesdays
- ▶ have a Scrum and a 5h session on Fridays
- ▶ do some individual work remotely to cover up any missed sessions

Team sessions are mainly held in Maari. The team leader leads the sessions.

Process Overview

Neronet

Schedule

Plans

Recurring events

Overview

Events

Practices

Overview

Information

Outline

Schedule
Plans

Recurring events

Practices
Overview
Information

Process Overview

Neronet

Schedule

Plans

Recurring events

Overview
Events

Practices

Overview
Information

Used practices and tools:

- ▶ Testing & quality assurance: DoD
- ▶ Communication: Email, Flowdock, Hangout/Skype, WhatsApp
- ▶ Backlog management: Agilefant
- ▶ Time tracking: Agilefant
- ▶ Version control: GitHub
- ▶ Collaboration: Floobits, ShareLaTeX, Google Drive
- ▶ Motivation: Team Spirit Recap

We guarantee quality by making

- ▶ sure team members adhere to the DoD.
- ▶ each member responsible for the quality of the code he reviewed.
- ▶ the PO is responsible for the business value of sprint goals and BIs and for making sure the team understands them.

We use the following channels:

- ▶ Email - communication that involves the PO and Coach
- ▶ Flowdock - general forum for everyday discussion
- ▶ WhatsApp/Phone - urgent team communication
- ▶ Skype/Hangout - remote teamworking sessions

The sprint team leader communicates with the PO and Coach.

Backlog management

Agilefant is used for all backlogs.

- ▶ Version 1 - the **product backlog**
- ▶ Sprint 0-6 - the sprint backlogs

Process Overview

Neronet

Schedule

Plans

Recurring events

Overview

Events

Practices

Overview

Information

Time tracking

We track our worktime with Agilefant. We log each work session duration to the story or task we worked on.

Process Overview

Neronet

Schedule

Plans

Recurring events

Overview

Events

Practices

Overview

Information

Version control

We use Git with GitHub and branches:

- ▶ **stable** - tested and working version
- ▶ **sprint** - increment work in progress
- ▶ **storyX** - story work in progress

Our development process has four steps:

1. We assign a developer and a reviewer for each story
2. The developer solves the story in a new branch
3. Then he asks the reviewer for a merge review
4. The reviewer determines whether the work meets the story requirements and the DoD
 - ▶ if not, he asks the developer to continue working on it
 - ▶ if yes, he merges the story branch to the sprint branch and the developer marks the story as *done*

When we work simultaneously on the same documents we use Floobits, ShareLaTeX, or Google Drive depending on the document.

Floobits is connected to a Git repo clone which facilitates when working with many files. It is particularly suitable for collaborative code level planning and code reviews.

We have three main practices to maintain motivation:

- ▶ Regular review of the *six tactics*
- ▶ Regular review of our *team spirit recap*
- ▶ Regular discussion on problems (retrospectives)

Motivation

Six tactics

1. Create common goals
2. Focus on facts
3. Develop multiple alternatives
4. Maintain a balanced power structure
5. Seek consensus with qualification
6. Use humour

Eisenhardt K M, Kahwajy J L, and Bourgeois III L J (1997) How Management Teams Can Have a Good Fight, Harvard Business Review, Vol. 4, pp. 77-85.

Process Overview

Neronet

Schedule

Plans

Recurring events

Overview

Events

Practices

Overview

Information

Motivation

Team spirit recap

Mission: Why we exist

- ▶ Create useful software for Pyry (and others)
- ▶ We are doing this project to learn (software development, requirements engineering, architecture, project management, quality assurance, Scrum, communication with client)
- ▶ We want grade five and the quality award

Process Overview

Neronet

Schedule

Plans

Recurring events

Overview

Events

Practices

Overview

Information

Motivation

Team spirit recap

Values: What we believe in and how we will behave

- ▶ Superior quality
- ▶ Self-development
- ▶ Respect
- ▶ Achievement

Process Overview

Neronet

Schedule

Plans

Recurring events

Overview

Events

Practices

Overview

Information

Motivation

Team spirit recap

Vision: What we want to be

- ▶ We want to see ourselves as the best of the course teams
- ▶ We want to win the Quality award!
- ▶ We want to get grade 5+.
- ▶ We want to get an awesome reference (GitHub repo) that we can market on our future job applications.
- ▶ We want our tool to serve people in such a way that a community of users develops around it and continues it's development. We want to launch a successful opensource project, which we can speak proudly of even years from now.

Motivation

Team spirit recap

- ▶ Objective: Ace the course and develop a very useful and popular tool
- ▶ Scope: See product vision
- ▶ Advantage: We have high motivation, we meet in person every week, we have an active and responsible Scrum Master

Process Overview

Neronet

Schedule

Plans

Recurring events

Overview

Events

Practices

Overview

Information