

Process Overview

Neronet

*Toolbox for managing the training
neural networks*

CSE-C2610
Software Project

Aalto University

November 3, 2015

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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.	11.1.	38	30	33	33	33	33	33	33
3	11.1.	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

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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. 16-18	Progress review I	team + PO + Coach

All events, locations, agendas and other details are up to date in **Google Calendar**.

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Recurring events:

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

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

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Sprint retrospective

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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

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 next

Work plans are adjusted depending on input.

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Teamwork sessions

Most weeks, we'll

- ▶ have a Scrum and a 3h session on Wednesdays
- ▶ have a Scrum and a 6h session on Fridays
- ▶ do 2h of individual work remotely; more to cover up any missed sessions

Team sessions are mainly held in Maari.

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Used practices and tools:

- ▶ Testing & quality assurance: DoD
- ▶ Communication: Flowdock, Email, WhatsApp, Skype
- ▶ Backlog management: Agilefant
- ▶ Time tracking: Agilefant
- ▶ Version control: GitHub
- ▶ Collaboration: Floobits, ShareLatex, Google Drive
- ▶ Motivation: Six tactics

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:

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

The SM 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

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Time tracking

We track our worktime with Agilefant by logging each session duration as effort spent to a story or task.

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Version control

We use Git with GitHub with 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.

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.

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