Mobilefant Project Plan

November 15, 2013

1 Introduction

Agilefant is an open source tool for task and requirement management for agile software development. It is provided as an open-source version and a hosted version. The hosted version comprises more and better features in comparison to the open-source version.

Agilefant has approximately 10,000 users worldwide, and according to the customer, the number of registered users increases every day.

Agilefant is a very powerful tool for requirement management but currently it is too detailed to be used on mobile devices (small screens). The customer wishes that the users of Agilefant could use its the most important functions using their mobile phones and tablets. Agilefant's main competitors are already providing mobile applications, so it is crucial to Agilefant to response for this. Therefore, the goal of our team is to develop a mobile application that works along the hosted version of Agilefant and can be used on both smart phones and tables.

2 Stakeholders and staffing

The group's web page is located in Studentwiki.

The group's email is mobilefant#agilefant.org.

2.1 The Team

Here we are only listing the role, name, email, responsibilities and an assistant role of each team member. We have a document with everyone's personal informations such as email, phone number and Github name, but we won't publish those informations excluding email.

Role	Name	Email	Responsibilities	Assistant role
Project Manager	Benjamin Behm	benjamin.behm#aalto.fi	Organizing the work, removing impediments, documenting, process supervising, coding	-
Architect	Harri Lampi	harri.lampi#aalto.fi	Architectural design	-
Quality Assurance	Matias Kuusela	matias.kuusela#aalto.fi	QA	-
Developer	Aleksi Hoffman	aleksi.hoffman#aalto.fi		
Developer	Miro Vilkki	miro.vilkki#aalto.fi		
Developer	Rolle Saarinen	rolle.saarinen#aalto.fi		
Developer	Janne Gröndahl	janne.grondahl#aalto.fi		
Developer	Janne Kajovuori	janne.kajovuori#aalto.fi		
Developer	Joakim Kronqvist	joakim.kronqvist#aalto.fi		

Table 1: The team

NB! Each developer should act as an assistant to some of the SE experts in order to get a broader view to the project.

2.2 Mentor

Role	Name	Email
Mentor	Casper Lassenius	casper.lassenius#aalto.fi

Table 2: Mentor

2.3 Customer

Role	Name	Email
Product owner	Jarno Vähäniitty	jarno#agilefant.org
Tech. Lead	Santeri Korri	santeri#agilefant.org

Table 3: Customer representatives

3 The Goals

3.1 Project goals

The main goal is to develop a mobile application for Agilefant that contains the main functionalities of its cloud version.

#	Goal	Verification Criteria
1	To build a limited set of key use cases	Architecturally sound, clear implementation and testable
2	-	-

Table 4: Project goals in the priority order

3.2 Personal goals

Personal learning goals can be found in Google Docs: Learning Goals

4 Resources

4.1 Personnel

Each member must invest credits * 27 hours - 15 hours in the project.

Link to the time allocation page. Everyone should mark how much time he/she is going to use per a week to the table.

4.2 Material

We need mobile phones to test the application. The customer has promised to deliver some test phones, but a wide range of different phones with different platforms cannot be guaranteed. The CSE department can borrow desktop computers to our group with virtual machines installed. These computers need to be set up to our team room A243.

The room (A243) will be shared with an another project group (#15 - TrafficSense) so we need to schedule the usage of the room with them. The idea will be that both teams will have specific days and hours the room is exclusively reserved for them. At other times, everyone could use the room.

A development environment can be downloaded from Internet if needed. Eclipse is an open-source and free to download, and the project manager has a JetBrain's Classroom License, so that IntelliJ IDEA Ultimate can be used during the course.

5 Work practices

5.1 Practices

5.1.1 Iterative development

Development will be divided into several sprints so that after every sprint we would have an improved product increment of the application ready to release.

A sprint contains four phases: sprint planning, development, demo, and retrospective.

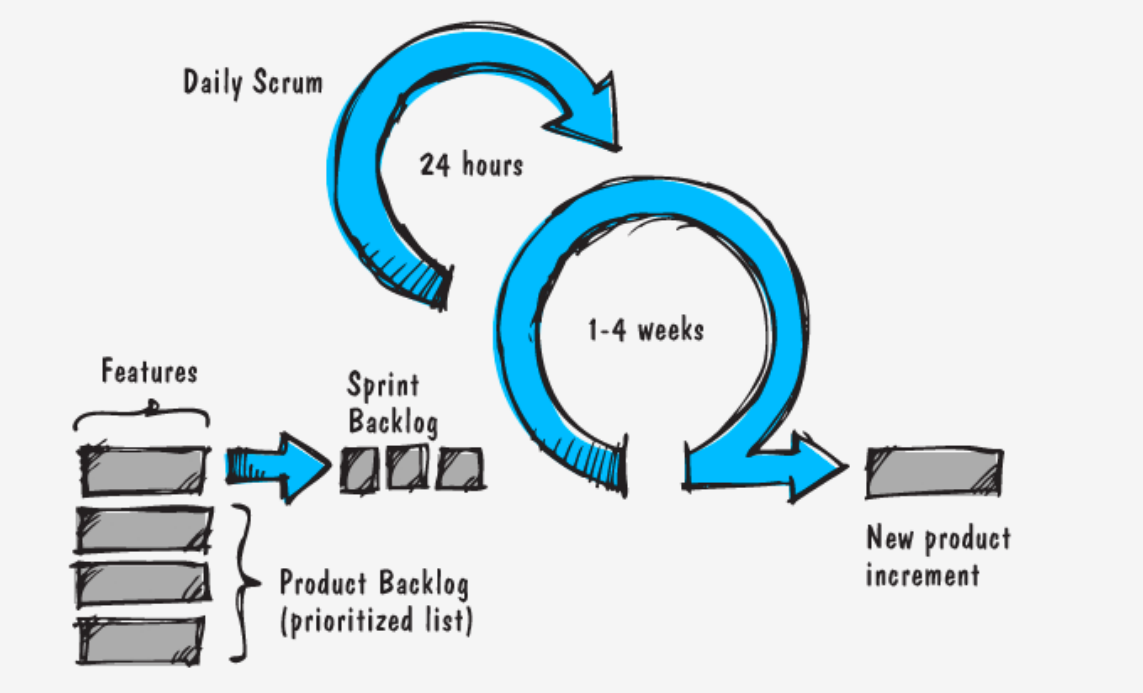

Figure 1: Scrum process

5.1.2 Sprint planning

Sprint planning session will be divided into two parts. The content of the sprint planning is presented in Table 5.

Stories will be estimated based on fibonacci numbers. Story points will be given based on people's opinion of how much time it requires to finish the story. Possible story points are listed below:

1: without a break
2: half a day
3: a day (= full work day for a pair)
5: two work days
10: five days

If the story is estimated to be larger than 10 story points, it can be seen as an epic and should be split to smaller stories so that it can be finished during the sprint.

Part	Duration	Description	Participants
1	1h	The product owner presents the prioritized product backlog, so that the teams would understand what should be done during a following sprint. The product owner is there for answering any questions the teams would like to ask relating to the user stories and tasks. Then the teams select items from the product backlog to the sprint backlog based on their knowledge of how much work they are capable of doing during a sprint. Sprint goal is agreed in this part.	Product owner, team members
2	2h	Teams are separated to plan how the chosen work will be done during the sprint. Users stories will be assigned to team members. User stories are split into tasks and the required time per a task is estimated by a person the task was assigned to. In this meeting, the team can start design the system so that they are able to convert the backlog items into a working software increment.	Team members

Table 5: The content of a sprint planning

5.1.3 Documenting

5.1.4 Risk management

5.1.5 Time tracking

The groups' time tracking will be applied in Agilefant. The group should follow these time tracking practices:

- Each group member should enter their own hours by themselves to the Agilefant.
- Hours are logged directly to the story or more preferably to the task after the work is done.
- Hours should be logged before leaving the office

Agilefant provides burndown charts that are used to follow the project's progress and those also tell whether estimated hours are correlating with actual hours. That helps group to shape its task estimation.

As the group is logging spent effort to the Agilefant, the customer is able to follow whether the group is working as promised.

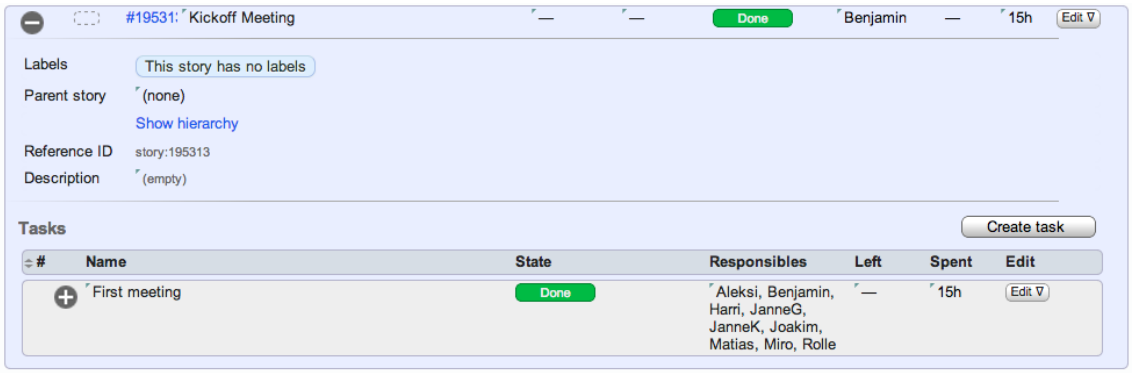

Figure 2: Story and task with spent effort

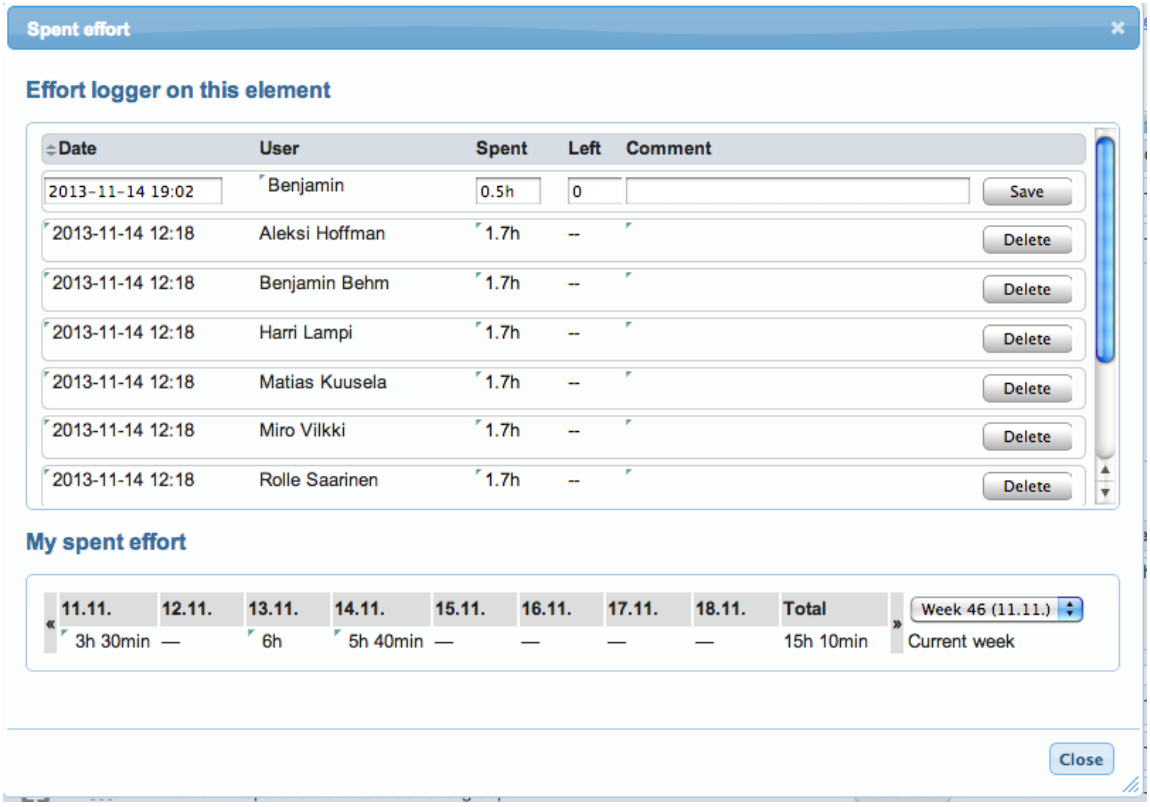

Figure 3: Log spent effort

When the course is over, credits will be given based on the hours logged to the Agilefant (+ hours spent on lectures). The view shown in Figure 4 can be found in Timesheets where user needs to select backlog(s), interval and user(s) to generate the timesheet where used hours are listed.

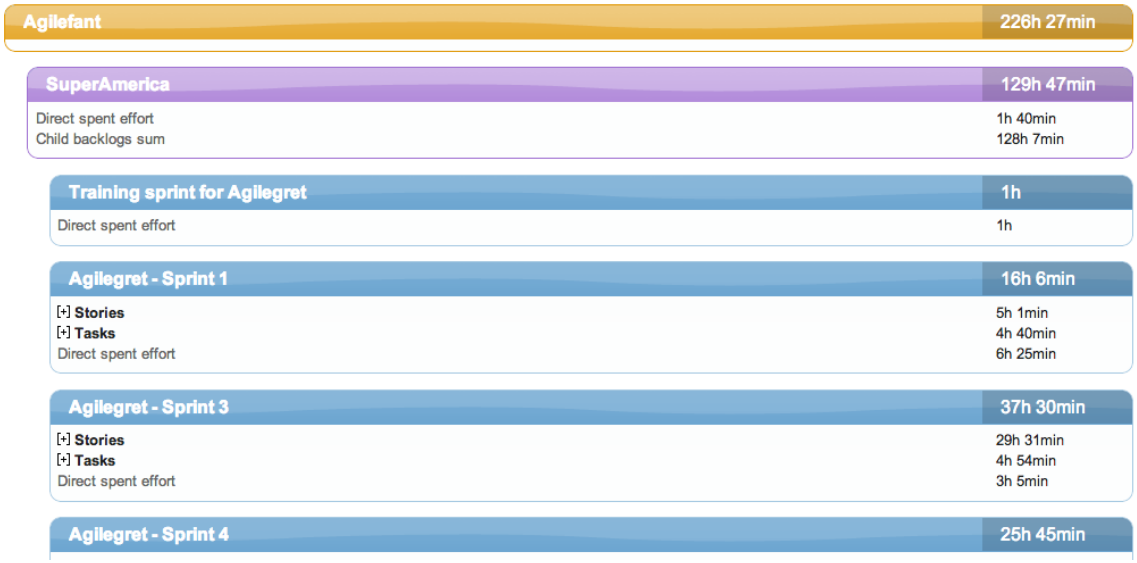

Figure 4: Total used hours

5.1.6 Communication

Team will keep a daily standup meeting every time they gather together to work. The daily standup will be a short, 15-minute time-boxed meeting where team members synchronize their activities. In this meeting, people will tell, in turn, three things: What they have done since last daily meeting, what they will do before the next meeting, and what obstacles are in the way.

The product manager will propose if the team could use Flowdock as the main communication tool. Aalto provides 180 days license for that.

Google Hangout is proposed to be used for communication with off-site team members.

In very urgent situations phone calls or text messaging can be used, but primary the group is using tools mentioned above.

5.1.7 Defect tracking

Agilefant could be used

5.1.8 Version control

Git and Github will be used for version control.

TODO: How to use it when 3 teams? Check options from here.

5.1.9 Process improvement

A retro will be arranged at the end of each sprint. There will be three phases:

1. First, we will go through impediments from the previous retro and check if the impediments has been fixed.
2. Second, each team member will write down aspects that has worked well and which might need some attention.
3. Third, these will be collected and written to Excel and everyone should explain what they wrote.

5.1.10 Requirement engineering

Agilefant will be used for gathering requirements from customer and maintaining the backlog.

5.1.11 Design

5.1.12 Practice X

6 Phasing

Tasks are not listed in this project plan, as they are listed and maintained in Agilefant.

6.1 Schedule

6.2 Sprint 1 Plan

Goals:

- To understand Agilefant's vision
- To have the main requirements from the Customer
- To understand the process that is used in the course
- To have a draft of the architecture design

6.3 Sprint 2 Plan

Goals:

- Set up the development environment
- Get touch with the code
- To have the code base ready
- To have the architecture design ready

Deliverables:

- Project plan (no QA plan)
- Progress report slides
- Contract (one per group)
- Requirements document (except details of requirements)

7 Risk log

ID	Risk	Prob.	Sev.	Effects	Controlling actions	Responsible
1	A developer quits in the middle of the project. 2	3	Some knowledge is lost.	Project scope must be decreased.	Taking care of good team spirit. Using pair programming.	The team / project manager

Table 6: A risk log (Probability: 1=lowest, 3=highest, Severity: 1= lowest, 3=highest)

References

[1] Project Management Guidelines, "http://www.soberit.hut.fi/T-76.4115/13-14/instructions/project_management.html#Project_review"

[2] Project Management Guidelines, "http://www.soberit.hut.fi/T-76.4115/13-14/instructions/template/project_plan.html"

[3] Scrum Guide, "https://www.scrum.org/Portals/0/Documents/Scrum%20Guides/Scrum_Guide.pdf"