

Team Project 3 Individual Report

A social network for project management

Draft 1

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December 10, 2014

1 Preliminaries

A project management tool or suite is a program or set of programs which allow a team of developers, managers, and customers to understand the state of a project. These tools tend to manage *tickets*, which allow the team to record progress on problems they are having with the project. These problems are referred to as *bugs* and *issues*.

Examples of project management tools used today are *Trac*, *Jira*, *Asana* and *Trello*. Others, such as *Codebook* by Microsoft, have been theorised and had papers published about them, but have not come to fruition.

2 Motivation

When writing a software project as a team, it can be difficult to manage issues and bugs. This is generally done with a project management suite such as Trac, in the form of tickets. However, it is often found that programmers discuss these tickets in an informal environment and, once a conversation is had detailing the issue, this work must be carried out a second time in the creation and comments section of a ticket.

This is a problem for two reasons: firstly, it duplicates work and wastes time. Secondly, project management tools can be cumbersome to work, making their integration into people's work schedule difficult.

This problem is clearly one worth solving, and is one we are faced with daily as software developers working in a team.

3 Background

There are several related works we have had to build our ideas upon in the design stage of this project.

- Asana

Asana is a system which attempts to remove the need for email to update people regarding news they are to be aware of: due dates, tasks, comments on their work etc. Asana was founded by Facebook executives and developers initially working on improving productivity at Facebook. Asana is a useful tool, but aims to pull together many different pieces of information into one central hub – the idea powering the product is to *kill email*.

Because we are looking to collect only information and meta-information about tickets, Asana does not solve the problem noticed in the programming world.

- Codebook

Codebook is a social networking oriented way to manage code repositories and the people who maintain

them. Codebook creates graphs and connections between people and project management artifacts like tickets.

Codebook doesn't quite solve the problem we are faced with, however. This is because, while the social network Codebook creates allows managers, developers, and customers to link together, the graphs it creates are complex and do not necessarily permit easy communication. While networking people and code together is useful, the main concern here is that programmers will communicate using channels other than their project management tools.

- Trello

Trello is a web-based tool based on the KanBan system of managing lists. It can be used to track and archive progress at various specific points in a project's development cycle.

However, while Trello is useful, it can also add to the clutter we are seeking to prevent. Trello does not actively track tickets and also does not allow for "chats" – instead, it manages lists of arbitrary things and provides a commenting system and history of recent actions on a board of cards.

As an aside, it should be noted that our team uses Trello alongside Facebook to manage our own tasks, as a to-do list.

As can be seen, there have been many attempts to solve the problem identified in this introduction's *Motivation* section. However, none of them come at the problem at an angle which allows for all conversation and project-management to be done in one place. Therefore, a new system must be devised.

4 Aims

This project attempts to cumulate the functionality of Asana, Codebook, and Trello into one web-based package where project managers, developers, and customers can discuss a project in a social-networking oriented way. *Using these conversations*, this project should then develop *tickets* as the conversations being had with calculable and attachable metadata.

The project should be able to socially network at least developers, their quality assurance managers, and their project managers, and should be able to manage multiple projects. This is functionality also found in Codebook. It should be able to process metadata like Asana can, and allow users to keep track of issues and bugs like Trello enables with its lists. However, the project should *also* do this while fixing the flaw found with all three aforementioned solutions: it should do so in a way centered around conversations.

With appropriate user interface design, using conversations as tickets should also solve the three issues laid out in the *Motivation* section:

1. The project allows for discussion of the issues and bugs within their project management suite.
2. Because discussion occurs directly within a ticket, there is no need to duplicate work as there would be creating tickets on the basis of Skype or Facebook conversations.
3. An easy-to-use user interface would allow for easy ticket management, meaning that the tool would be convenient enough that tickets would get created in the first place, which is sometimes untrue of tools such as Trac.

5 Progress

6 Conclusion