

Web Based Scrum Board

Project Milestone 1: Project Proposal

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Abstract

When it comes to the different fields of engineering, software engineering is one of the newest fields that is prevalent today. Civil engineering, for example, has been around for thousands of years. With this new field of engineering, new methodologies must be developed to help keep software engineers organized and improve efficiency on large scale projects. As discussed in lecture, the 1995 CHAOS Report revealed that software engineering was a very expensive and inefficient process [1]. Since then many different systems have been developed to fix the issue of expensive and laborious software projects. One system that proved to be very effective in certain settings was the Agile methodology [2]. The Agile system is effective because it was crafted with the knowledge that project requirements will change over time [2]. A common implementation of the Agile methodology is the Scrum board. There are many services that provide a web based Scrum board so that developers can easily implement Agile methodologies. Our solution to the problem of inefficient software development is to create our own web based Scrum board with additional features that many alternatives fail to implement.

Introduction

Scrum boards are extremely helpful; in fact, 87% of teams that employ agile methods use stand up meetings to discuss scrum boards and the resulting project planning [3]. They help when it comes to breaking a project down into more manageable steps and play a large role in team management. However, there are many drawbacks that a traditional scrum board presents. One big one is with remote working; many remote working employees can find it hard to keep up with the milestones discussed relating to scrum boards, as they cannot be in person. With the rise of global teams and the adaptation of flexible working after the pandemic, this issue has become even more prominent. Some employees also find it harder to make time for these meetings in their busy schedules, especially as project deadlines approach. Traditional scrum boards can also make it hard to make sure everyone is staying on track. There is no concrete system to observe accountability which poses a big problem, particularly in larger sized teams. Without automated update systems, managers rely on manual updates from team members, which can cause things to be missed and gaps in communication. Some have even said that traditional scrum boards can lead to scope creep, since there is not as much structure as they would like there to be [4]. With projects becoming more complex, the need for a new scrum board that fills the holes of a traditional scrum board is greater than ever.

Related Work

There exist many online scrum boards, as well as online boards that can be used as a scrum board among other organization options. Examples include Jira, Miro, and Trello. Jira and

Trello both handle their user experiences through easy to understand menus, while tools like Miro are more focused as a collaborative whiteboard, although they can still be used as a scrum board through certain tools, such as sticky notes. Tools like Jira and Trello allow users to create categories for tasks (such as “In Progress,” “Complete,” etc.) and add “cards” under these categories. Each card can have a description and people assigned to them, allowing teams to specifically state what to do for a certain task and who should work on it.

Both types of scrum board applications allow teams to remotely work together on an online scrum board to establish requirements and assign tasks. Although it is possible to create a whiteboard tool with a focus on scrum boards, our team will be focusing on the menu/page-based UX of web-based scrum boards. It is not only more feasible to create this type of application instead of a live whiteboard, but it also gives the potential for our app to streamline the user experience and provide a more basic but easier to understand interface.

Software Engineering Process

The software engineering process that was chosen was the incremental approach for our web-based scrum board. Iterative models allow for more productivity due to the fact that groups can work in smaller iterations to develop software in more iterative steps. Within the iterative models, we decided to use an incremental model. Using an iterative sequence of waterfall models allows us to focus on smaller assignments one at a time. For each assignment we can do analysis, design, implementation, and review. The incremental model also works to our benefit compared to the other software engineering processes as it allows us to get out assignments quickly.

References

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