Slack-2-Kanban

Team: Slack'in Off

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Abstract

Software Development is a relatively young process, that has created many difficulties that need to be addressed as hardware and software both evolve with time. These issues are sometimes localized, but many can be found within most software development teams.

One of the major issues would be communication, as it is a requirement for any project that includes multiple members. Especially with the recent effects of COVID, and nearly everyone now having a form of online communication, the latency of information and instruction transfer is growing. That lag in communication is only highlighted with members working in separate time zones, which is not an uncommon practice these days. All of this is only adding to the already high amount of time spent in planning, which can span nearly 3-4 weeks, in some cases.

We aim to alleviate some stress and time consumption with an automotive process, in the form of a "Slack Bot". Utilizing the somewhat integrated bot formatting for SLACK, a common communication platform for many companies and projects, we can automatically label and add instructions for members on a Kanban Board. This will give proper credit to the correct developer, keep teams on their timeline, and consistently document tasks and work.

Introduction

The problem with most software processes is that communication and documentation between team members, managers, and product owners is incomplete. In other words, tasks that are assigned in chats like Discord, Slack, and Teams are never added to documentation, specifically the kanban board. This creates issues later in the software process where completed tasks are completely forgotten about during retrospective meetings. It is especially important for companies to track the amount of time their developers are spending on coding certain tasks. With a better system in place, the software process could make communication and documentation streamlined resulting in better efficiency with team oriented development. Most importantly, resulting in companies saving money.

Related Work

There are plenty of AI chat bots that help us plan our day and keep organized. With the increased use of Slack in business settings, because of remote work, however the chatbot that is offered through Slack is limited in how it can help teams stay informed and organized with tasks that come up throughout the day. This can cause teams to lose track of work that comes up throughout the day.

We can draw comparisons between our Slack Bot, and other popular AI's that are used in other popular tech products, such as Siri, Alexa, Chat GPT, Discord Bots, etc. A lot of inspiration is taken from these AI bots. For example, Chat GPT is a text-based AI (as opposed to Siri or Alexa), so it will take text input. However, it would function more similarly to Siri or Alexa, in that it can create and edit schedules.

Software Engineering Process

The software process we will use is the iterative model of incrementing. We believe this to be the best method to establish early functionality and focus on each proposed function of interacting with both the kanban and the Slack to roll out basic functionality and testing as fast as possible. In using this method, we can segment the process and separate our work to create better implementation of each section, helping to separate testing as well and eventually being able to bring it together and interact fully. With each iteration of the software we will have improved functionality in one or all functions, being able to split our resources into each section and implement them simultaneously. By the end, all methods will be implemented and brought together with full testing.

References

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