

# Standup Survey Bot

Anonymously Request Help

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## Abstract

An inefficiency with IRAD (Internal Research and Development) projects is that it is not necessarily clear what a programmer should be working on. With new projects that have new issues, that can arise, problems and tickets can change on the fly. To combat this variability, and

increase visibility for the programmer, a Standup bot will allow a user to submit their confidence to their project lead, automating the process of needing the project lead needing to check in or request an invitation for a one-on-one meeting. With this, clarification can be given without needing to notify everybody on the team to know that you are lost at the moment.

## **Introduction**

Software engineering requires a specific mindset, and a specific approach to designing a product. Without this specificity, issues and inefficiencies arise with time being mismanaged between programmers, leading to an inefficient allocation of resources. According to Scacchi from the University of Southern California, productivity should be measured based on how the application is delivered and when it has been delivered compared to the time constraints given<sup>1</sup>. With the combination of how Scacchi views productivity, and the problem of not well-defined problems in software development, makes new projects very wasteful in what they could be.

IRAD's (Internal Research and Development) projects are conducted within a company to either create a new product or improve an existing product, without an external client guiding the project towards a vision. These projects are typically used in companies hoping to cash in on grants given to them by the Department of Defense (DOD).<sup>2</sup> In order to do this, the ill-defined problems outlined in the grants are given to the software companies. With this, there are many issues with the interpretation of how to solve the issue. So, it can end up being a huge sinkhole for many companies financially.

## **Related Work**

Scrum Meetings are check-ins daily during a sprint with an agile workflow. These typically work well in well-established projects, as the project goal is clear, the team knows what they should be building, and how that feature fits into the grand scheme of an application that they are working on.

Range is an application created to replace standups in newer projects<sup>3</sup>. It created a way for standups to be asynchronous, and project leads can manually assign goals and tasks to members through it, allowing tickets to be assigned based off to the discretion of the group manager.

## **Software Engineering Process**

The software engineering process that this project would use would be the waterfall. This project doesn't have a lot of associated risks and there's precedent for all the components (client-service communication, databases, audio-to-speech). Since it's easy to conceive how the components will be merged, and due to their simplicity, this model is the most fitting. Furthermore, employees falling behind need the assurance that their information is kept confidential, which delves into legality if things go wrong, and this model is accommodating to the needs of the lawyers



## References

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