

Onboarding Manager

Streamlining Integration to Save Time and Money

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ABSTRACT

The Onboarding Manager will be used to help integrate software engineers into new projects as fast as possible and aid them when joining in the middle of projects. It will automatically set up their development environment by setting up their repositories and making sure all project documents are shared with them. Additionally, it will aid new developers by helping them understand the documentation of code that has already been written for the project so that they can start writing code sooner.

INTRODUCTION

Onboarding new developers is a critical and reoccurring challenging aspect of project development in the software development world. Most projects have complex development environments, complicated project architectures, and often the documentation is scattered making onboarding difficult for new developers. In addition, the current onboarding process requires time and attention from other developers on the team, this takes them away from their own responsibilities and decreases productivity.

Without a standardized system, new developers are left on their own, often leading to errors, inconsistencies, and large time consumption. These issues highlight the need for a more structured and automated approach to onboarding, ensuring

that developers can integrate smoothly into any working team. By implementing the Onboarding Manager AI, we can ensure that new developers receive uniform and comprehensive training, helping the developer understand the project and its goals. This system will not only enhance the new developers' experience but also increase the productivity of the team.

This project aims to revolutionize the onboarding process for new developers. A positive onboarding experience is essential for establishing a sense of need for new developers. With the Onboarding Manager AI teams can increase productivity and efficiently, allowing for a more supportive and high performing development environment.

RELATED WORK

Some related studies that have been completed explore how important the onboarding process is to new developers retaining their jobs. Firstly, a study about onboarding in software teams states how factors like completely finishing a task and the availability of sufficient project documentation led to a better onboarding process and higher chance for the developer to retain their job. Specifically, clear documentation of presentations, code, and important documents was vital as it allowed the new developers to quickly find information [1]. Additionally, another study

about the success of onboarding processes detailed how an enjoyable or smooth onboarding process led to a higher job retention rate. This rate was calculated based on the new developers experience through the three main onboarding activities of orientation, training, and support [2]. The Onboarding Manager would work to improve mainly the first two of these three main activities and lead to a better acclimation of the new developer.

SOFTWARE ENGINEERING PROCESS

We plan on using an incremental model for this project. An incremental approach allows us to break down the onboarding process into smaller, more manageable features as we focus on one at a time, such as setting up repositories or automatically sharing project documents. In this manner, we can gradually build up the functionality of the Onboarding Manager. Incremental development also allows us to deliver components of the Onboarding Manager earlier in the process. For example, a basic feature such as automatic repository setup can be delivered sooner than more complex features.

Incremental development also suits this project since requirements may fluctuate. The onboarding needs for different projects will vary, and the incremental model offers us flexibility in adapting the Onboarding Manager based on user feedback from early releases. If a particular feature needs adjustment, or a new feature becomes a priority, our subsequent increments can adapt to these changes. We also reduce risk by developing the Onboarding Manager in increments. Each increment undergoes testing and review, ensuring that any issues are identified and resolved early in the development process. This will ultimately make debugging easier, as smaller

increments are easier to analyze than an entire system built at once.

Incremental development also allows for continuous user feedback, as users can test each new feature as it is released. This suits the nature of large onboarding processes, as different companies may reveal nuances that were not initially apparent. The feedback loop allows our team to refine the user experience and tailor features to better suit developers and project managers. Ultimately, the incremental approach supports the complexity and evolving nature of the onboarding processes in software development. Delivering the system piece by piece will ensure new developers that they can be onboarded quickly and efficiently as each new feature of the Onboarding Manager is rolled out.

REFERENCES

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- [2] Sharma, Gaurav & Stol, Klaas-Jan. (2019). Exploring Onboarding Success, Organizational Fit, and Turnover Intention of Software Professionals. *Journal of Systems and Software*.