Scope Creep

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Abstract

Dell Technologies is a leading global technology company that provides technology solutions and services ranging from infrastructure to software and devices (Dell EMC, n.d.). The firm is primarily known for manufacturing and selling Dell Windows machines that are prevalent all over the world. As an intern at Dell Technologies, I got the opportunity to work on an interesting development project along with three other interns for twelve weeks. Since my team and I had this time limitation, we experienced scope creep and learned how to overcome the challenges in order to deliver a successful project.

Introduction

Dell Technologies, founded by current Chief Executive Officer (CEO) Michael Dell, is comprised of a family of businesses including Dell, Pivotal, RSA, Secureworks, Virtustream, VMware, and the recently acquired EMC in 2016, which marked the biggest tech deal in history (Dell Technologies, n.d.). These organizations are a collective force of innovative efforts with a strong presence in 180 countries worldwide. Dell Technologies provides infrastructure for organizations to expand on their digital assets, transform the Information Technology (IT) industry, as well as protect information (Dell EMC, n.d.). Their mission is to advance human progress by providing greater access to technology for people around the world (Dell Technologies, n.d.).

As an undergraduate student studying Computer Science at Worcester Polytechnic Institute, I got the unique opportunity to pursue a software engineering internship at Dell Technologies in the Storage Department, specifically on the Test Automation and Enablement team. The team works on high-performance storage systems and delivers next-generation tools to improve the efficiency of development operations as well as quality using advanced technologies, tools, and software engineering methodologies.

Three other college interns and I worked on a project to design and develop a website for quality assurance analysts to execute and analyze test cases for various storage projects that are underway for release. During the middle of the development phase, my team and I encountered scope creep with some of our full-time teammates. Scope creep happens when additional features of a new product, requirements, or work is beyond the agreed-upon extent of the project (R.

Larson & E. Larson, 2009). Scope creep could have been avoided and we thought of ways to overcome this issue.

Discussion

Project Methodology Background

The intern team and I followed the Software Development Life Cycle (SDLC) that involves planning, design, implementation, testing, and deployment. Throughout the duration of the project, we followed the Scaled Agile Framework (SAFe) methodology, a top-down method to project management and decision-making. With SAFe, extensive planning takes place before project execution that determines factors such as how long the project will take to complete. Then, the project implementation phase is usually split into two week iterations called sprints and an updated version of the project is presented at the end of the sprint (Wermann, 2020). My team tracked our own and each other's progress using a tool called JIRA in addition to having daily scrum meetings to update our technical lead and scrum master on our status. We spent about two weeks on the planning phase. Next, we designed a prototype of the website as well the database which we presented to the rest of the team. We got approval of our design and split up the feature implementation among our intern team.

Scope Creep Situation

During the development phase of the website, my team and I presented our demo and updates during our second sprint which was midway through our internship. Some features took longer to implement than previously planned so we mentioned that it was a work in progress.

However, some teammates wanted to add on more features that they thought would be useful for

users to both the database design and the website that we neither discussed nor got approval

during the Agile SDLC phases. The changes were large and would detour the route of the

project. Making these changes would also mean that my team and I would not have time to finish

the project, leading to a lack of quality of the website by leaving approved features unfinished.

Overcoming Scope Creep

　　After this ordeal, my intern team and I identified areas where scope creep could have

been avoided to overcome this issue. Instead of spending a lot of time on planning the project in

the beginning of our internship, we could have started the design and implementation phase

because of our limited time. We also could have gotten more clarification on necessary

requirements from users so that last minute changes would not have to rapidly be made. We

decided to be upfront about our scope and emphasize which features we plan to prioritize to the

rest of the team. The product owner and the team also learned about how this situation could

have been avoided for next time and approved our current plan. We were then able to work on

the required functionalities of the website and deliver a successful project at the end of our

internship.

Conclusion

Although my teammates and I followed SAFe methodologies to implement our project,

we encountered scope creep. We identified areas where it could have been avoided and acted on

finding a solution. This method not only ensured we had a successful project at the end of our

twelve week program at Dell Technologies but also helped us learn how to avoid scope creep in

the future.

References

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