What are the challenges associated with inducting those people unfamiliar with git version control work-flows into a multidisciplinary game development team, and how can they be overcome?

1801699

February 25, 2019

## 1 Introduction

Importance of version control within the industry [4] and usefulness of it in academic facilities is a fact[2]. While working in a multidisciplinary team I have tried to stop my teammates from inter-reacting with the logistics in the repository forcing them to stay within their branches resulting in myself struggling with synchronization of files all around the branches of my teammates. After the time I have decided to educate my teammates on how our git flow will work and made sure that we won't encounter many issues associated with the management of our repository. As the problems will arise I will incrementally develop a better way to deliver necessary information on how to manage certain situations to avoid them in the future [6]. In this paper, I will focus upon challenges and importance of educating team members to a set standard on a version control flow created for a team.

## 2 Importance of understanding version control

As an undergraduate student after graduating the course, I will have to have at least a brief understanding of version control as it is an entry-level job requirement for the most jobs focused around software development[4]. Understanding version control helps with management of data coming from various sources around many different places for quick and easy use of it enabling us to perform tasks quicker[5]. Other than that, if after graduation individual does not want to join any company on the market and would want to open their own games development company it helps with collaboration with foreign freelancers to develop interesting games or

participate in game jams with many different available locations[3] and help with simultaneous working of multiple people on the same project to complete tasks even quicker to save the time[1]. Also, version control enables us to jump between tasks[7] and focus upon more relevant tasks at the given moment without interfering with the rest of the project files making it easier to hot-fix bugs and errors within the code as well as it is easier to get help from the internet to receive feedback from other users of GitHub or other file hosting service on the written code[8].

## References

- [1] Lindsay D. Grace. Newsjam: Making games at the pace of news. In *Proceedings of the Interna*tional Conference on Game Jams, Hackathons, and Game Creation Events, pages 17–20, New York, NY, USA. ACM.
- [2] Courtney Hsing and Vanessa Gennarelli. Using github in the classroom predicts student learning outcomes and classroom experiences: Findings from a survey of students and teachers. In Proceedings of the 50th ACM Technical Symposium on Computer Science Education, pages 672–678, New York, NY, USA. ACM.
- [3] Alexey Izvalov, Serhii Nedilko, and Vitalii Nedilko. From one location to five. In *Proceedings* of the International Conference on Game Jams, Hackathons, and Game Creation Events, pages 39–42, New York, NY, USA. ACM.
- [4] Eric Nersesian and Adam Spryszynski. Incorporating workplace structure in a classroom setting. In *Proceedings of the 19th Annual SIG Conference*

- on Information Technology Education, pages 190–190, New York, NY, USA. ACM.
- [5] Raghu Ramakrishnan and Team Members CISL. Scale-out beyond map-reduce. In Proceedings of the 19th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, pages 1–1, New York, NY, USA. ACM.
- [6] Gary Shute. Principles of software engineering. [Online]. Available: https://www.d.umn.edu/gshute/softeng/principles.ht [Accessed: 24-Feb-2019].
- [7] Bogdan Vasilescu, Kelly Blincoe, Qi Xuan, Casey Casalnuovo, Daniela Damian, Premkumar De-

- vanbu, and Vladimir Filkov. The sky is not the limit: Multitasking across github projects. In *Proceedings of the 38th International Conference on Software Engineering*, pages 994–1005, New York, NY, USA. ACM.
- [8] Yu Wu, Jessica Kropczynski, Patrick C. Shih, and John M. Carroll. Exploring the ecosystem of software developers on github and other platforms. In Proceedings of the Companion Publication of the 17th ACM Conference on Computer Supported Cooperative Work & Social Computing, pages 265–268, New York, NY, USA. ACM.