Unit 11 Reflection

This unit looked at potential future trends in software engineering project management. This is particularly relevant given the restrictions COVID introduced to the world over the past two years. Project managers must adapt to the new style of remote working, which presents challenges in communication and productivity. I looked at the SPACE (satisfaction, performance, activity, communication, and efficiency) framework presented by Forsgren et al. (2021). This is an enlightening framework because it sets about dispelling various productivity myths. For example, higher developer activity equates to better productivity, or a single productivity metric satisfies all information requirements. Interesting is the link between productivity and satisfaction because they feed one another in software development and other aspects of daily life.

Part of delivering quality software requires addressing the idea of secure software development. Cifuentes and Bierman (2019) point out that none of the mainstream programming languages provides abstractions that safely address buffer overflow, injection attacks, and data leaks. However, Rust is designed to avoid buffer overflows and race conditions. This points to the responsibility of software developers to better understand the errors present in their programming language of choice to mitigate vulnerabilities.

In terms of project management, the unit's reading material by Jaafari (2003) listed the four types of people: Type 1 (Nerds), Type 2 (Average Citizens), Type 3 (Fanatics) and Type 4 (Outcasts). It was interesting to learn about these types as they impact the type of project management model required. For instance, Type 1 requires Ad-hoc, Type 2 requires bureaucratic, Type 3 requires normative, and Type 4 requires creative-reflective.

The team finalised our project implementation this week and prepared for a recorded presentation. We reviewed presentation slides and made necessary amendments to ensure a consistent look and feel with an agreeable reading flow. After the slides were prepared and cleaned up, we moved on to the recording of the voice presentation. This was fun because each voice actor (team member) used ad-lib techniques to record their slides, with several takes until each voice actor was satisfied.

References

Cifuentes, C. & Bierman, G. (2019). What is a Secure Programming Language?. In *3rd Summit on Advances in Programming Languages (SNAPL 2019).*

Forsgren, N., Storey, M.A., Maddila, C., Zimmermann, T., Houck, B. & Butler, J. (2021). The SPACE of Developer Productivity: There's more to it than you think. *Queue*, *19*(1):20-48.

Jaafari, A., (2003). Project management in the age of complexity and change. *Project management journal*, *34*(4):47-57.