

Unit 5: An Introduction to Testing

Required Reading

Pillai, A. B (2017). *Software Architecture with Python*. Birmingham, UK. Packt Publishing Ltd.

- Chapter 3.
- Chapter 4.
- Chapter 10.

Ferrer, J., Francisco, C. & Enrique, A. (2012) *Estimating Software Testing Complexity*. Information and Software Technology.

ISO/IEC/IEEE (2015) Software and Systems Engineering – Software Testing – Part 4: Test Techniques, ISO/IEC/IEEE 29119-4.

Shepperd, M. (1988) A Critique of Cyclomatic Complexity as a Software Metric, *Software Engineering Journal*.

Additional Reading

Song, I. Guedea-Elizalde, F. & Karray, F (2007) CONCORD: A Control Framework for Distributed Real-Time Systems. *IEEE Sensors Journal* 7(7):1078 – 1090.

Watson, A. H. & McCabe, T. J. (1996) *Structured Testing: A Testing Methodology Using the Cyclomatic Complexity Metric*. US Department of Commerce Technology Administration National Institute of Standards and Technology. Available from: <https://nvlpubs.nist.gov/nistpubs/Legacy/SP/nistspecialpublication500-235.pdf> [Accessed 9 September 2021].

Caldeira, J., Brito e Abreu, F., Cardoso, J. & Reis, J. (2020) Unveiling Process Insights from Refactoring Practices. *Computer Science*, Arxiv.