

Unit 3: UML

This week's reading focuses on the strengths and weaknesses of using UML to examine the design of software on paper prior to its implementation.

Required Reading

Philips, D. (2018) *Python 3 Object-Oriented programming*. 3rd ed. Packt Publishing

- Chapter 1.

Rumbaugh, J., Jacobson, I. & Booch, G. (2004) *The Unified Modeling Language Reference Manual*. 2nd ed. Addison-Wesley.

- Chapter 3.

Lange, C. F. J., Chaudron, M. R. V. & Muskens, J. (2006) In practice: UML software architecture and design description. *IEEE Software* 23(2): 40-46.

Grady, B., Robert, A., Maksimchuk, M., Engle, W., Young, B., Connallen, J. & Houston, K. (2008) *Object-oriented analysis and design with applications*. 3rd ed. SIGSOFT. 33(5).

IBM. (2021) *UML Models and Diagrams*.

Additional Reading

Bettini, L., Loreti, M. & Venneri, B. (2003) 'On Multiple Inheritance in Java', in: D'Hondt, T. (eds) *Technology of Object-Oriented Languages, Systems and Architectures*. The Kluwer International Series in Engineering and Computer Science, vol 732. Springer, Boston, MA. https://doi.org/10.1007/978-1-4615-0413-9_1. pp. 1-15.

Lucas, F., Molina, F. & Ambrosio, T. (2009) A systematic review of UML model consistency management. *Information and Software Technology* 51(12):1631-1645.
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