



Theme	The Open Source Software Movement	
	The Open Source movement, somewhat a variant of the Free Software movement, has had a marked effect on software development and evolution over the last few tens of years. It contrasts with the proprietary model of program development and use. Some important aspects of the movement are open programming languages and the governance of software projects.	
Problems	How do open source language ecosystems (such as the extensive Python libraries) shape engineering solutions?	How does the governance in open-source projects impact the long-term maintenance of software?
Learning outcomes	<p>At the end of the work, regarding the topic and problem studied, students should be able to:</p> <ul style="list-style-type: none"> • define the main underlying terms • present a clear, illustrated summary with clarifying examples of the underlying concepts • if possible, identify examples of the use of the underlying concepts in academic life (teaching and research) at FEUP (or U.Porto) • if possible, fit the underlying concepts into one or more of the UN Sustainable Development Goals* • present the group's vision, formed after the work has been carried out 	
Biblio	<p>Mere examples:</p> <ul style="list-style-type: none"> • Midha, V., & Bhattacharjee, A. (2012). Governance Practices and Software Maintenance: A Study of Open Source Projects. Information Systems Research, 23(2), 488-501. • Wikipedia: Open-source software 	
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* <https://sdgs.un.org/goals>