

Western Canon of Software Engineering Principles

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Abstract

Western canon is a set of books, movies, music and art which holds the essence of western culture, it contains the common sense of western people. The western canon of software engineering is a set of artworks (books, papers, blogs, projects) which holds the essence of software engineering. The canon is not fixed, it changes time to time because scholars are arguing constantly what belongs to the "Top 100 of Best Software Engineering Books Ever", what are the "Essential Books", the "Must Reads". The canon is important because it answers the question "What books should I read to become a better software engineer?". It tells us also which books to use as references for Computer Science courses such as Software Engineering Technologies. The canon relies on a school or on a tradition. For example Carnegie Mellon University issues each year the "Seminal Papers in Software Engineering: The Carnegie Mellon Canonical Collection" which is a list of papers which must be studied by their software engineering students. Another example is "SWEBOK, Guide to the Software Engineering Body of Knowledge" by IEEE Computer Society which is a very broad collection of software engineering terminologies. A more concise canon is the "SOLID design principles" which consists of the 5 most prominent object-oriented design principles. This paper is not as broad as SWEBOK, nor as concise as SOLID, it is a list of principles which holds the essence of software engineering in the western culture. The three main principles on the highest abstraction level are the following:

- The codebase of a software is constantly changes.
- A software is a product just like a bag of chips.
- There is no silver bullet in the field of software engineering.

This paper discusses the abstraction levels, the most important principles, and the ideas behind them. In the same time it encourages other scholars and schools to define their own canon in the field of software engineering, and argue about the artworks which belongs to the Western Canon of Software Engineering.

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