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Open access to source code, and results, open systems

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Contents

1 The Open Access

Nowadays, the open access term is used in many ways. Firstly, let us declare the meaning of this expression within the context of IT to better understand other things that will be mentioned later. You may heard phrases like '*Open access to source code*' as well as '*Open source software*'. Accordingly, this phrases may also appear under the '*free*' acronym, which is not the proper notion. There is an article [7] about the contrast of these two terms, which describes and explains the differences between them. All of these names indicates one attribute (model, philosophy or methodology) of the software development - the right of free access to the source code of a software to anyone known as the open source philosophy. This right stands for the free way of software source code free usage, inspection, modification and distribution that may be restricted by further open source licenses such as GPL – GNU General Public License, which will be described later. To clarify the veritable meaning of the open source let us specify the correct definition itself - the open source definition.

Definition 1.1. [1, 5, 8]

Open source does not just mean access to the source code. The distribution terms of an open source software must comply with the following criteria:

- Free Redistribution
- Inclusion of Source Code
- Inclusion of Derived Works
- Integrity of The Author's Source Code
- No Discrimination Against Persons or Groups
- No Discrimination Against Fields of Endeavor
- Distribution of License
- License Must Not Be Specific to a Product
- License Must Not Restrict Other Software
- License Must Be Technology–Neutral

As has been noted above, the definition is denoting a specific software type which is made freely available with respect to modification and distribution to anyone including license restrictions and non-discriminatory rules. At the present time, this influencing fact has affected not just the software itself but the development as well. Open source projects, products, or initiatives embrace and celebrate principles of open exchange, collaborative participation, rapid prototyping, transparency, meritocracy, and community-oriented development [6]. The strongest side of the open source is its community together with the collaboration power. The open source community is diverse and highly motivated [4].

At the present time, there is a countless amount of open source projects. Many of them become popular quite quickly and has drawn the interest of academia and industry. Several projects are running for decades, some of them are just at the beginning of their dawn. As an illustration, the Table 1 below contains some of the well known and still running projects under the terms of open source.

Project	Year	Author(s)
Unix OS	1969/1970	Ken Thompson, Dennis Ritchie & others
GNU Project	1983	Richard Stallman
Linux Kernel	1991	Linus Torvalds

Table 1: The oldest and still existing open source projects [3, 2, 9].

In contrast to the open source, its antonym is known as proprietary sometimes referred as non-free. In conclusion, it indicates copyright restrictions that prevent unrestricted distribution or reuse of the software. The pros and cons of these two types of software philosophy will be explained later in the following sections.

2 Success of Open Source Projects

TODO

3 Impacts and Results

TODO

4 The Open Systems

TODO

5 My Notes

TODOREMOVE!

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