

# OSS and business of developing software

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HAMLET BOOK CHAPTER 1 (1.3)

# What is Open Source Software (OSS)?

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Open source software is computer software that has a source code available to the general public for use as is or with modifications. This software typically does not require a license fee. There are open source software applications for a variety of different uses such as office automation, web design, content management, operating systems, and communications. The key fact that makes open source software (OSS) different from proprietary software is its license. As copyright material, software is almost always licensed. The license indicates how the software may be used. OSS is unique in that it is always released under a license that has been certified to meet the criteria of the Open Source Definition.

These criteria include the right to:

- Redistribute the software without restriction;
- Access the source code
- Modify the source code and
- Distribute the modified version of the software.

# Is it free?

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Keep in mind that while OSS is usually free there are some exceptions. While the software itself may be free, make sure you consider the need for additional services or products, as these may have costs attached (e.g. access to software updates, support services). You also have to take into account possible switching costs. These costs would include moving data from an old system to new systems, training costs and costs involved when switching from one platform to another one (e.g. the costs of switching from Microsoft Windows to a Linux operating system). If your business does not have enough information technology expertise, you may have to outsource outside technical services to provide open source support or to manage its implementation and delivery

# How Did Open Source Get Started?

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In the 1970s, proprietary software – i.e. software that did not allow users to redistribute it, modify it, or access its source code – became the norm. The development of open source software was a reaction to the fact that changes or improvements could not be made to proprietary software by other developers or users. The open source movement started with Richard Stallman's general public license model (in the 1980s), which holds that software should be freely modifiable, with the condition that if you make improvements to the software, you must put the improvements back in the open source community. The rationale for the open source movement is that a larger group of programmers not concerned with proprietary ownership will produce a better product

# OSS

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Enthusiasts

Free Software Movement

- End user of the software pays nothing for it
- Anyone is free to modify the existing software
- Anyone can contribute to the development of the free software

**Contributing to OSS as a Beginner**

Remove a defect (aka Bug) in an existing library

Write a piece of documentation

# OSS and Software Engineering Guidelines

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Clean code

- Readable
- Maintainable
- Understandable

Generally accepted rules within a team

- Norms of indentation
- Description of methods and classes etc.
- Variable names
- Following the rules like 'don't-repeat-yourself'

# Business of Developing Software

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- Market forces
  - Time to market
- Perceived Software Quality
- Software Team
- Management of Software Development
  - Resource allocation
  - Progress monitoring
  - Quality assurance

# Task

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Visit <https://opensource.google/>

Select 3 OSS Projects that you find interesting

In a document write names of these projects

also mention the reason why are you interested in these projects

Create an account at GitHub

Write your GitHub username in the above document

Write 3 to 4 sentences on how will GitHub help if you want to contribute to an OSS project?

What is Google Summer of Code? Not more than half a page.