# Principles and Comparisons of the Open-source Licenses GPL 3.0, LGPL 3.0, AL 2.0, CPL 1.0 (EPL 1.0) and "OpenJDK with CLASSPATH Exception

by Victoria Volkova

4152 SEMINAR AUS BIS LV LEITER: UNIV. PROF. DR. RONY G. FLATSCHER SS 2021

## AGENDA

Introduction to the Topic "Open-Source Software Licensing"

Paper Structure Explanation

The Main Historical Facts

Software Licensing and Source Code

Free and Open Source Licenses and their Principles

GPL 3.0

LGPL 3.0

AL 2.0

CPL and EPL

OpenJDK and a Classpath Exception

Compatibility Chart

Discussion

## Introduction to the Topic "Open-Source Software Licensing"

"When I first got into technology I did not really understand what open source was. Once I started writing Software, I realized how important this would be."

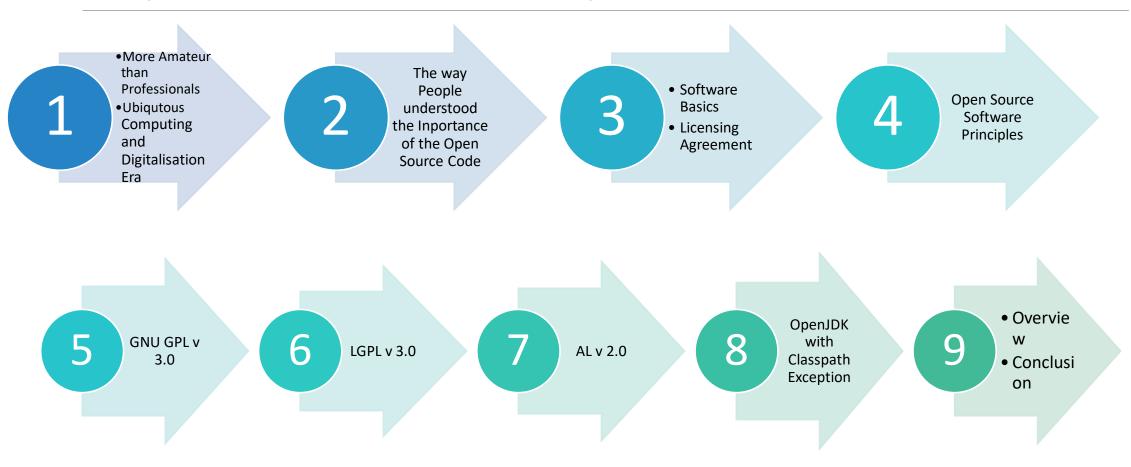
By Matt Mullenweg, an American Web Developer and Entrepreneur

"Certainly there is a phenomenon around open source. You know free software will be a vibrant idea. There will be a lot of neat things that get done there." • Wordpress

- Moodle
- Linux OS
- Mozilla Firefox
- Android by Google
- Phyton
- Monday
- Ethereum Blockchain

By Bill Gates

### Paper's Structure Explanation



## The Main Historical Facts

1980: the code for a printer driver by Richard Stallman

1990: Software engineering for private businesses and closed source codes

Stallmans Initiative to create an opensource software system and attract new software engineers to study new projects

1985: Free Software Movement and GNU Manifesto

1997: Eric Raymond publiced the book "The Cathedral and the Bazaar"

1998: Open Source Initiative Foundation

## Software Licensing and Source Code

**Contractual Agreement** 

Copyright Law

Regulation of the Underlying source code

Privacy regulations

Sales restrictions

International use

**Source Code**: is a human-readable text that supports and speeds up programming and development of new software.

Source codes are an intellectual property, the usage of which is protected or managed by licensing

Binary Codes for Open Source Licensing

## Richard Stallman

"Open Source is a development methodology,

Free software is a social movement."

By Richard Stallman



# Free and Open Source Licensing Principles (not equal to Free of Charge!)

Four basic **FREE**doms:

The freedom to run the program as a private user or a commercial organization wish, for any purpose (freedom 0)

The freedom to study how the program works, and change it so it does your computing as you wish (freedom 1) The freedom to redistribute copies, original or modified software, free or against a charge for sale (freedom 2).

The freedom to distribute copies of your modified versions to others (freedom 3).

#### **Open Source Software Principles**

1.Free Redistribution
2.Source Code
3.Derived Works
4.Integrity of the Author's Source Code
5.No Discrimination Against Persons or Groups
6.No Discrimination Against Fields of Endeavour
7.Distribution of License
8.License Must Not Be Specific to a Product
9.License Must Not Restrict Other Software
10.License Must Be technology Neutral

Open Source Definition by the OSI

## General Public License 3.0

GPL 3.0 General Public License	Authorization	Conditions	Limitations
Is a free software license that employs 4 Freedoms philosophy. The fundamental facet is copyleft. Any software under GPL can be run for all purposes, commercial or not.	Distribution	Copyleft	No Warranty
	Modification	License Protection	Trademark Use
	Commercial Use	Disclose Source	Liability
	Private Use	Version Modifications	No proprietary programm integraion
	Patent Use		

## Lesser General Public License v 3.0

LGPL 3.0	Authorization	Conditions	Limitations
Is developed in 2007 with a weaker copyleft system than the one of GPL = no personal custom source code, no requirement to be published under the same license terms.	Commercial Use	Copyleft	Liability
	Private Use	License + Copyright Information	Warranty
	Patent Use	Disclose Source	
	Modification	Version Modifications	
	Distribution		

## Apache License 2.0

APACHE LICENSE 2.0	Authorization	Conditions	Limitations
permissive open source license that requires preservation and maintenance of its copyright and license information. It widely adopted and refers to "Open	Commercial Use	Copyright and Licensing notice	Warranty
Standards". Licensed works, larger works,	Disribution		Trademark Use
and modifications are not under the same licensing terms and can be distributed in the absence of. Apache does not require	Modification	Version	Liability
companies to reveal technologies or skills used in order to construct a program on the	Patented Use	Modification	Liability
basis of the work code	Private Use		

## Common Public License 1.0

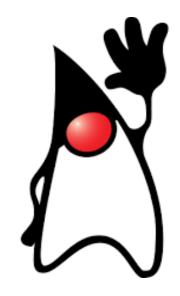
CPL 1.0 - Common Public License	Authorizatio n	Conditions	Limitations
Common Public License is a free software AND open-source software license published by IBM. The Free Software Foundation and Open Source Initiative both have approved the license terms of the CPL. Contributors may not remove or alter any copyright notices contained within the Program. Permission for distribution of a modified computer program is granted as long as the source code of a modified program are made	Commercial Use	Modification Notice	No Warranty
	Distribution	Copyright and Licensing notice + source code	No or conditional liability
available to others.	Modification		

## Eclipse Public License 2.0

Eclipse Public License	Authorization	Conditions	Limitations
Is a free AND open source software license that substitues CPL. Freedom to distribute the software under any license (Open Source Initiative)	Distribution	License Information	No Warranty
	Modification	Source Code Information	No Liability
	Commercial Use		
	Private Use		
	Patent Use		

## OpenJDK with Classpath Exception

OpenJDK with classpath Exception	Authorization	Conditions	Limitations
Afree and open source application of the software development kit (a	Distribution	GPL conditions	ТСК
binary product constructed specifically for Java on Windows,	Modification		oracle certification
Solaris, macOS and Linux). OpenJDK falls under GPL license and is			
approved by the Free Software Foundation and the Open Source			
Initiative.			



## Thank You for Your Attention, Let's Discuss:

- 1. Have You heard something about the Software Lisencing?
- 2. Do You associate Software Licensing with an expensive and compulsary step to use a software?
- 3. Have You heard about the Free Software before?
- 4. What open-source licensed software do You use daily?
- 5. Have You ever written an open-source code together with other developers?
- 6. Are You a pro or con Team? Why?