



Open Source Software Engineering

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Freeware

Freeware Software



- Free refer to price ,
- freedom to use is restricted by owner
- No source code Available
- Copyright law : yes
- Philosophy :
 - Marketing Goals – Intended to benefit the owner
 - Make profit end of day

Examples : WhatsApp, Skype, Adobe, Gmail etc



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Public Domain Software

Public Domain Software

- Belong to Public ; Can be modified , distributed or sold even without any attribution by anyone
- Rules : Creative common organisation
 - <https://creativecommons.org>
- Charge : No cost
- License : Creative Common Licenses
- Copyright law : No
- Example : SQL Lite

Creative Common



- **Creative Commons** is a nonprofit organization that helps overcome legal obstacles to the sharing of knowledge and creativity to address the world's most pressing challenges.
- Provide [Creative Commons licenses](#) and [public domain tools](#) that give every person and organization in the world a free, simple, and standardized way to grant copyright permissions for creative and academic works; ensure proper attribution; and allow others to copy, distribute, and make use of those works
- Work closely with major institutions and governments to create, adopt and implement open licensing and ensure the correct use of CC licenses and CC-licensed content



Summary



	Free software	Open source Software	Freeware	Public domain software
Definition	“FREE” is a matter of liberty , not price	“OPEN” does not just mean access to the source code; more about collaboration	Free refers to price , while freedom of the use is restricted by creator	PUBLIC domain belongs to the public as a whole
Philosophy	Social movement	Development methodology	Marketing goals	Copyright disclamation
Rules	Four freedoms	Open source Initiatives		Creative common Org
Free of charge	Not necessary	Not Necessary	YES	YES
Copyright law	YES	YES	YES	NO
Examples	Linux, Ubuntu , MySQL, Apache	Linux, Ubuntu , MySQL, Apache	Skype, Adobe acrobat	SQLite

Recap : previous sessions

- Open Source : Why, What and Examples
- Open Source Initiatives (OSI) and Free software Foundations (FSF)
- Advantages and Disadvantages of Open source software
- Principle of Open source software
- History of Open Source Software
- Cost of Open Source Software
- Understanding of Free Software
- Understanding of Open Source Software
- Understanding of Freeware
- Understanding of Public domain software



Understanding Intellectual property Rights and Software Licenses

Topic :



- Understanding Intellectual Property Rights
- Understanding Software Licenses
 - **Licensing Models in OSS:**
 - Copyright,
 - Copyleft,
 - Permissive,
 - Creative Commons



Intellectual Property Rights (IPR)

- The creator of an artefact is considered to be the owner of the artefact, This implies that the owner who writes the code owns it – unless there exists a written contract that states differently
- In House software development :
 - The entire ownership or the copy right of the software remains with the Organisation
- Outsource software development :
 - The issues related to Intellectual Property (IP) rights are correctly Managed - By written contracts
 - Rights to artefacts like business ideas , images , diagram, source code and documentations remain under the sole ownership of the client company .



Intellectual Property Rights (IPR)

Types of Intellectual Property Rights : relevant to the software industry

- **Patents** – used to protect functional features , like hardware configurations etc
- **Copyrights** – used to protect works of authorship , like source code , diagram etc
- **Trade secrets** – used to protect internal business secrets, like business and pricing models
- **Trademarks** - used to protect brand recognition, through logo etc
 - Patents, copyright and trade secrets are used to protect the technology itself
 - Trademarks do not protect technology, but help in **distinguishing a product in the marketplace**

IPR in Software Domain



Who can claim the ownership of the IPR ?

All the people involved in a development project, may claim for the ownership of the IPR for the various artefacts developed as a part of the project.

- **Employee Involved** – are the first who have the IP rights to all the artefacts developed during employment ; however they are usually restricted by the employment contracts.
- **Consultant or contractors (Organisation or individual)**
 - unless a written contract says otherwise , they also claim for the ownership of the projects artefacts
- **Vendor company developing the software**
 - unless documented , although the clients pay for the services provided by the vendor , they are not necessarily the owners

IPR in Software Domain



Category of Software source code in Projects :

- **Unique code**
- **Open source code**
- **Existing / Third- party code**
- **Unique code** : refers to the code specifically developed for a particular project
 - source code and related artefacts of the software may be limited use to the developer or vendor organisations
 - Vendor organisation may be ready to assign ownership of the same or grant exclusive license to the client company
- **Open Source code** – refers to use of open source code or technologies which are Publicly available
 - Neither the client, nor the vendor owns the IP rights to the Open sources code or technology ; nor does anyone maintain exclave control over it.
 - Violation of the Open source license could lead to significant risks of the entire projects e.g. as per GPL – one must publish source code of the complete projects
 - Ensure open source are used legally and all Compliance requirements are met.

IPR in Software domain



Existing / Third party code – Witten by the developing company for other projects – reuse the same for the current projects

- **Existing code** : Vendor is not willing to give the ownership of this type of code, since they would want to continue using it for other clients
- **Third party code or technology** : Pay a license for the code in a way that is compatible with client's projects
 - Other projects artefacts like image , audio and video files etc .. Could also be included

References and further readings

Open Source Initiative <https://opensource.org/>

Open Source Resources <https://opensource.com/>

Open Source Guides (<https://opensource.guide/>

Creative commons <https://creativecommons.org>

GNU <https://www.gnu.org/>

Copyleft <https://copyleft.org/>