

Open Source Software

Overview

Introduction – open source, free software, BSD(Berkeley Software Distribution), Methodologies, software freedom, development model, licenses and patents, Apache license, General Public Licence , Copy Right, Copy Left, social impact of open source, open source/ closed source, open source government, open source provider perspective ,open source contributor, financial impact on open source technology ,economic impact .

Case studies – Apache web server, Linux , Android , Mozilla firefox , Wikipedia , Drupal, WordPress , GCC , GDB , GitHub , OpenOffice.

Contributing to OSS – GitHub , Wikipedia,etc

Open source operating system – GNU , Android , BSD , Open Solaris, etc.

Open Source Software

- Software(computer/Mobile)
- What is OSS – download, edit, improve & redistribute
- Developers Community
- **NRCFOSS**- National Resource Centre for Free/Open Source Software
- Development of free app with OSS
- Source code & Object Code
- closed source software/proprietary software
- open source vs closed source
- WEBSITE- www.sourceforge.com , www.opensource.org
- advantages OSS
- development platform(FREE CODE) - Github.com

Open Source Software

Advantages

- Control
- Training
- Security
- Stability

FREE software VS Open Source Software

Free Software	Open Source Software
concept started in 1983	was introduced in 1990
social movement	development methodology
developed under free software foundation(FSF)	developed under open source initiative(OSI)
less control over the code	more control over the code
released under General Public License	released under different license such as Apache, BSD , MIT

Public Domain Software

- Similar like OSS
- No copyright
- No licensing
- Free to use/ permission not required
- Easy to download due to small size
- Flexible/Reliable
- SQLite, I2P & CERN httpd

Public Domain Software

- Need to verify authenticity
- Confusion
- Might not user friendly

All PDS are OSS but, all OSS may not PDS

— GNU Project —

Mass collaborative initiative for development of free software.

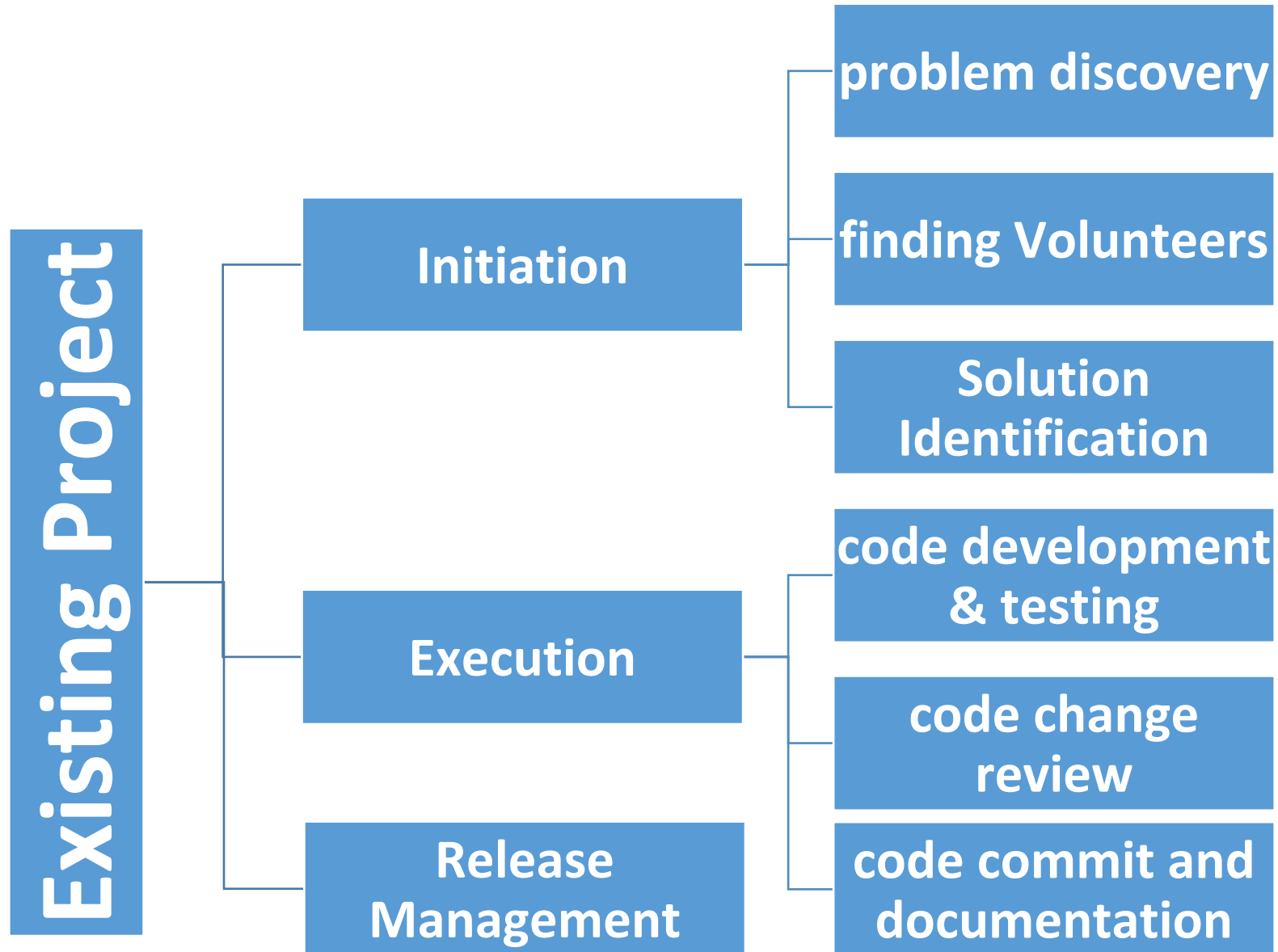
- Operating System vs Kernel
- To create free operating system
- Free means freedom to use source code(**RUN,COPY,DISTRIBUTE,STUDY & IMPROVE**)
- **GPL** – General Public License
- **LGPL** – Lesser General Public License
- Copy left concept
- Unix like operating system
- GNU/Linux

– Principles Of–

open source software

- Principle of Openness
- Principle of Transparency
- Principle of early and often
- Expectation of Community
- Principle of Collaboration

- Open Source – Development model



- Open Source – Development model

1. Cathedral model
2. Bazaar Model

COPY RIGHT,PATENT & TRADEMARK

- **Copyright** secures Creative or intellectual creations.
- **Trademarks** secure the branding under which products and services are sold.
- **Patent** secures inventions that are useful for the world and has some use. E.g. New invention in pharmaceutical industry.
- **Copyright laws** apply to the intellectual property for the duration of the **artist's life plus 70 years**.
- **Trademark laws** last **forever** provided that the mark in question is actively in use by the source in commerce.
- **Patents** are limited duration intellectual property rights which last a **maximum of 20 years**.

COPY RIGHT, PATENT & TRADEMARK

- Patents, trademarks and copyrights are **collectively** known as **intellectual property** and generally refer to the rights associated with **intangible** knowledge or concepts.
- Copyright **protects original works** of authorship, while a patent protects **inventions** or **discoveries**.
- While copyright protects your work authorship, a trademark protect all the details so no one else can use it. Trademark protects details like: mark, name, font, colors. If you want to protect your brand identity you have to register a trademark for your company name, logos, and slogans.

COPY RIGHT,PATENT & TRADEMARK

- Want to **trademark your name**? It can be done, but first, ask yourself why you want to spend the money - and time - to trademark your name. You must also **meet specific requirements** to trademark your name with the **U.S. Patent and Trademark Office (USPTO)**
- A patent gives you the right to stop others from copying, manufacturing, selling or importing your invention without your permission.

COPY RIGHT,PATENT & TRADEMARK

- The author immediately owns the copyright in the work and only he or she enjoys certain rights, including the right to reproduce or redistribute the work, or to transfer or license such rights to others
- To **find** out if an invention has already been patented, you can search the United States Patent and Trademark Office's (USPTO) patent database.

COPY RIGHT,PATENT & TRADEMARK

- The **average cost to patent** an idea ranges from **\$5,000 to \$16,000+** depending on how simple or complex your invention is. An extremely simple design such as a paper clip typically costs **\$5,000 to \$7,000 to patent**, whereas a highly complex invention such as software or satellite technologies runs \$14,000 to \$16,000+.
- The **cost to trademark** a name is from \$225 to \$400. The average cost to trademark a logo is \$225 to \$600.

COPY RIGHT,PATENT & TRADEMARK

- Trademarks are usually made for names, symbols, catchphrases, figures, and lyrics. For example, the Nike symbol, the phrase "Just do it" and the name **Nike** are trademarked. ... If Nike hadn't trademarked "Just do it," anyone could use the phrase in branding and advertisements.