



SNS COLLEGE OF TECHNOLOGY



(An Autonomous Institution)

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A+' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF COMPUTER APPLICATIONS

ETHICS IN COMPUTING

I YEAR - II SEM

UNIT – II: ASPECTS OF COMPUTER CRIME AND INTELLECTUAL PROPERTY RIGHTS

TOPIC 7: FREE SOFTWARE AND OPEN SOURCE CODE

Free software and open source code are related but distinct concepts in the software development and licensing domain. Here's an overview of each:

Free Software:

Free software, as defined by the Free Software Foundation (FSF), refers to software that grants users the freedom to use, study, modify, and distribute the software. The term "free" in this context refers to freedom, not necessarily price. Free software is grounded in four essential freedoms:

1. Freedom to run the software for any purpose.
2. Freedom to study and modify the software's source code.
3. Freedom to redistribute copies to help others.
4. Freedom to distribute modified versions of the software.

These freedoms are typically protected through licenses like the GNU General Public License (GPL) and the GNU Lesser General Public License (LGPL). Free software promotes user empowerment, collaboration, and community-driven development.



Open Source Code:



Open source code refers to software with a licensing model that allows users to access, view, modify, and distribute the source code openly. The Open Source Initiative (OSI) defines open source software based on the Open Source Definition, which includes criteria such as free redistribution, access to source code, and allowance for derived works.

While open source software shares similarities with free software in terms of source code availability and modifiability, it does not always explicitly guarantee the four freedoms of free software. Open source licenses, such as the widely used MIT License and Apache License, focus on the practical benefits of open collaboration, transparency, and code sharing.

Relationship Between Free Software and Open Source Code:

- Free software and open source code share a common heritage and overlap in their principles and values. Both promote transparency, collaboration, and access to source code. However, they originated from different philosophical and ideological movements.
- Free software emphasizes the importance of users' freedom and the ethical aspects of software licensing. It seeks to protect users' rights to use, study, modify, and distribute software.
- Open source code, on the other hand, emerged from a pragmatic perspective, emphasizing the practical benefits of open collaboration and peer review. It focuses on the quality, security, and development efficiency that result from open code availability.
- Many licenses in use today, such as the GNU GPL, allow software to be both free and open source, aligning with the principles of both movements. However, not all open source licenses guarantee the four freedoms of free software.
- In practice, the terms "free software" and "open source" are often used interchangeably, but it's important to recognize their underlying differences in philosophy and licensing. Both approaches have significantly influenced the software industry and fostered innovation through collaborative development and shared knowledge.