**Content Licensing, Compliance and Legal Concerns**

Computer science is principally about the technical aspects of computing, but there are also overlaps with other areas too – like, for example, copyright law; the right of people to view and control their data; and the law as it stands in relation to offences that involve technology.

For the exam, you need to know about four main areas:

* Content and software licensing – e.g. Creative Commons and open-source/vs. proprietary
* The Data Protection Act and GDPR
* The Computer Misuse Act
* Copyright law

**Content and Software Licensing**

*Software Licensing*

Broadly speaking, software works (that is to say, programs, applications or systems of design) are split into two camps – **open source** and **proprietary** software. Open source, theoretically speaking, is software that is released free of charge from developers to the general population for use as they see fit. **Proprietary** software, on the other hand, is concerned with software that is sold by companies or organisations for use by licensed users. Using proprietary software without paying for it (or using it for purposes that the developers do not permit) is **piracy** and may breach copyright and/or licensing restrictions, opening up legal avenues for prosecution.

However, open-source software can have licenses too. These licenses can be described as, ‘free, but…’ – typically they’ll contain restrictions on what you can do with the software, whether you can reverse-engineer the software, or enhance it for your own purposes. There may be restrictions on distribution – i.e. you must credit the original authors if redistributing – or there may be restrictions on using the software in any larger software packages you develop.

For the exam, you don’t need to know all the different types of open-source license.

However, you do need to know that these licenses come in different shapes and sizes.

A good list to familiarise yourself with can be found here:

<https://en.wikipedia.org/wiki/Comparison_of_free_and_open-source_software_licenses>

*Content Licensing*

Content licenses are not the same as software licenses.

These cover, specifically, the content that is created using software. So, for example, the FreeBSD Documentation License covers the wording of the documentation of the FreeBSD operating system, which is an open-source Linux-based operating system. This enables anyone to use and distribute the wording in their FreeBSD implementations.

A more common set of standards are the **Creative Commons** licenses.

From Wikipedia:

A **Creative Commons** (**CC**) **license** is one of several [public copyright licenses](https://en.wikipedia.org/wiki/Public_copyright_license) that enable the free distribution of an otherwise [copyrighted](https://en.wikipedia.org/wiki/Copyright) "work".[[note 1]](https://en.wikipedia.org/wiki/Creative_Commons_license#cite_note-1) A CC license is used when an author wants to give other people the right to share, use, and build upon a work that he or she (that author) has created. CC provides an author flexibility (for example, he or she might choose to allow only non-commercial uses of a given work) and protects the people who use or redistribute an author's work from concerns of copyright infringement as long as they abide by the conditions that are specified in the license by which the author distributes the work.[[1]](https://en.wikipedia.org/wiki/Creative_Commons_license#cite_note-2)[[2]](https://en.wikipedia.org/wiki/Creative_Commons_license#cite_note-3)[[3]](https://en.wikipedia.org/wiki/Creative_Commons_license#cite_note-4)[[4]](https://en.wikipedia.org/wiki/Creative_Commons_license#cite_note-5)[[5]](https://en.wikipedia.org/wiki/Creative_Commons_license#cite_note-6)

(<https://en.wikipedia.org/wiki/Creative_Commons_license>)

Creative Commons provides a way for everyone (from the developer or creator to the end-user or customer) to understand what they can and cannot do with content.

‘Content’ in this case can cover photographs, rhetoric, functionality, some aspects of software, art or anything similar that is distributed electronically.

It is not intended to cover software – use the open-source license frameworks for this.

**Watch this video about Creative Commons licensing to find out more:**

<https://www.youtube.com/watch?v=8YkbeycRa2A>

**The Data Protection Act and GDPR**

The Data Protection Act (1998) is the original set of data protection principles which we’ll cover below.

As of 2018, this was superceded by the Data Protection Act (2018), also known as the General Data Protection Regulation, or GDPR.

*Data Protection Act (1998)*

There are eight principles of good information handling outlined in the Data Protection Act (1998) that state that data must be:

* Fairly and lawfully processed
* Processed for limited purposes
* Adequate, relevant and not excessive
* Accurate
* Not kept for longer than is necessary
* Processed in line with your rights
* Secure
* Not transferred to other countries without adequate protection

Personal data is becoming increasingly valuable and the collectors and users of data have responsibilities under the act, such as asking a data subject's permission to use the data.

There are three groups referred to in the Act:

* Data Subjects
* Data Users
* Data Controllers

The most well-known right of the data subject is the **right of access** – to exercise this, a person may make a **Subject Access Request** (SAR) which the Data Controller must respond to quickly and accurately. Anyone has the right to request a copy of their data under this rule.

*Data Protection Act (2018) / GDPR*

The DPA (2018) is an implementation of the EU directive for GDPR, and replaces the 8 principles of DBA (1998) with 5 similar principles.

For your exam, it’s not clear whether you’ll be tested on DPA (1998) or DPA (2018) – so learn both, just in case!

The five principles are:

* Data processing should be fair, lawful and transparent
* Personal data shall be collected for specified, explicit and legitimate purposes
* Personal data must be adequate, relevant and limited to what is necessary
* Personal data shall be accurate and kept up to date
* Personal data shall be kept for no longer than is necessary

The groups in the Act have also changed:

* Data Subjects
* Data Controllers
* Data Processors

There are quite a few other changes that have happened too and that it is not necessary to detail – for example, the expansion of the definition of ‘data subject’ to include a broader range of people wherever they are geographically located (this, incidentally, is why some websites aren’t available in the UK).

GDPR also provides certain new rights to the data subject:

* The right of transparency and modalities
* The right to be informed
* The right of access
* The right to rectification
* The right to be forgotten
* The right to restrict processing
* The right for notification obligation
* The right to data portability
* The right to object
* The right in relation to automated decision making and profiling

**The Computer Misuse Act (1990)**

The Computer Misuse Act (CMA) (1990) is a piece of legislation designed to criminalise certain activities. These activities were originally:

* Unauthorised access to computer material
* Unauthorised access with intent to commit or facilitate the commission of further offences
* Unauthorised modification of computer material

The Act is divided into Sections.

Sections 1, 2 and 3 roughly correspond to the three activities above – Section 1 around unauthorised access *per se*, Section 2 about gaining access to commit a further crime and Section 3 around modification – or ‘impairing the operation of a computer’.

In addition there are various **amendments** since 1990.

These amendments change the text of the law to broaden or limit the scope.

For example, amendments are in place that provide for:

* Access with intention to damage
* Making, supplying or obtaining articles for use in computer misuse offences
* Extending scope beyond the UK and to other countries
* Defining the role of terrorist-related activity in computer misuse

Watch this video to find out more:

<https://www.youtube.com/watch?v=uXIAwZvQJ3Y>

**Copyright Law**

Copyright law in the UK is contained in the **Copyright, Designs and Patents Act (1988)**, with amendments.

In essence, the key thing to remember is that it protects the rights of the person who created the material (and holds the copyright) from unauthorised copying, modification or distribution of their material.

Note that the creator and the copyright holder needn’t be the same person or organisation – you can transfer your copyright.

Holding copyright gives you certain **moral rights:**

* The right to be named as the creator of the work (‘paternity’)
* The right to object as someone named wrongly as the creator of the work (‘false attribution’)

Copyright protection is **automatic** under UK (and international law) but you might need some evidence that you are the original creator to enforce it.

You can find out more about UK copyright through the IPO (Information Property Office) – <https://www.ipo.gov.uk>

Copyright laws are mostly universal but can vary significantly between countries.

In the USA, the **Digital Millennium Copyright Act** (DMCA) is the enforcement mechanism for copyright. You might have heard of ‘DMCA takedown notices’ in relation to e.g. Facebook or YouTube content – this is where copyright holders object to e.g. a user posting a protected work, such as a film, and the notice requires the publisher to take it down.

Take this quiz to find out more about how copyright works:

<https://www.ucl.ac.uk/library/ucl-copyright-advice/copyright-quiz>