



F12.4 Copyright and licences

Technology and society · GCSE · OCR J277 1.6.1, AQA 8525 3.8, Edexcel
1CP2 5.2.3 · about 15 min

Name _____

Class _____

Date _____

What this lesson is about

Proprietary and open source software, common licences, and Creative Commons.

- Proprietary software
- Open source software
- Reading a licence
- Doing it properly

Questions

5 marks in all

- What does open source mean? [1 mark]
 - ☐ A The source code is published and may be read, changed and shared
 - ☐ B The software is free of charge only
 - ☐ C The software has no licence
 - ☐ D The software is out of date
- Give an advantage of proprietary software. [1 mark]
 - ☐ A It is usually supported and tested by the company
 - ☐ B You can change the source code
 - ☐ C It is always free
 - ☐ D You can share it freely
- What does a GPL licence require if you distribute your changes? [1 mark]
 - ☐ A You must release your version under the GPL too
 - ☐ B You must pay the author
 - ☐ C You must keep the changes secret
 - ☐ D You must apply for a patent
- What does CC BY mean for an image? [1 mark]
 - ☐ A You may use it if you credit the creator
 - ☐ B You may not use it
 - ☐ C You may use it only for schools
 - ☐ D You own it
- Which is a disadvantage of open source for a school? [1 mark]
 - ☐ A Support may come from volunteers rather than a company
 - ☐ B It cannot be changed
 - ☐ C It is always expensive
 - ☐ D It has no source code

The task: may I use it?

Write `allowed(licence, use)` that returns True or False for a proposed use, given `LICENCES` where each entry is (may change, may sell, must share changes). A use of "change" needs may change; "sell" needs may sell; "use as is" is always allowed. For each (licence, use) in `requests`, print `<licence> / <use>: yes` or `: no`. If the licence is not in `LICENCES`, print `<licence> / <use>: unknown licence`. At the end print `allowed: <n> of <total>`.

```
# the two lines every program starts with: the commands, then the robot
from bugbot import *
connect()

# licence: (may change, may sell, must share changes)
LICENCES = {"MIT": (True, True, False), "GPL": (True, True, True), "All rights reserved":
(False, False, False)}
requests = [
    ("MIT", "change"),
    ("MIT", "sell"),
    ("GPL", "change"),
    ("All rights reserved", "change"),
    ("All rights reserved", "use as is"),
    ("CC BY", "sell"),
]
```

Plan your program here, then type it in and press Run.



Do it on the robot

www.bugbotlab.com/learn/f12-4-copyright-and-licences/

The simulator checks it and tells you when it passes. Nothing to install, no account.

Challenges

1. Add a message for GPL saying changes must be shared.
2. You build a program on GPL code and want to sell it without sharing your source. What does the licence say?
3. Find the licence of a program you use. What does it let you do?