

# OUTSTANDING TEACHING, LEARNING AND ASSESSMENT TECHNICAL SKILLS NATIONAL PROGRAMME

**Legal Impact of Computing**

**Created by: qLegal for ADA National College for Digital Skills**

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This presentation was delivered to digital learners and covers ethics, data protection and Intellectual Property (IP) issues that need to be considered when creating new software.

This presentation could also be used by educators who teach design (in the pre-production phase) or manufacturing, as the topics link to developing design ideas or new product development.



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# Legal Impact of Computing

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## The Plan



### *Hour 1*

- All together upstairs
- What we'll cover:
  - Ethics
  - Data protection
  - IP



### *Hour 2*

- Split up
- What we'll do:
  - Apply!





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# Ethical Implications of Computing



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**Why are ethical considerations  
important when developing software?**



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**What are the relevant ethical issues  
when developing technology for  
Spokane's?**



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## Ethical Issues: overview

- Use and misuse of personal data
- Prevention of misuse of the product
- Environmental concerns
- Employment concerns

## Use and Misuse of Personal Data

Your business will deal with **personal data**.





## Use and Misuse of Personal Data

Questions to consider:

- Are the records adequately protected?
- What **personal information** might be recorded?
- Who is authorised to access the personal data?
- How long will records be kept?
- Will the records ever be permanently deleted?



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# Prevention of Misuse



## Prevention of Misuse

- Developers must anticipate misuse
- BUT developers also have to ensure their product remains attractive.



## Prevention of Misuse

- Questions to consider:
  - Is the misuse so large that the design should adapt to counteract it?
  - How should the need for misuse-prevention measures be balanced against maximising the overall quality of the product?

## Environmental Concerns

- There are plenty of environmental advantages in using technology.
- However, there are also some potential disadvantages:
  - Higher energy usage
  - Computer wastage
  - Pollution
  - Resource consumption



## Environmental Concerns

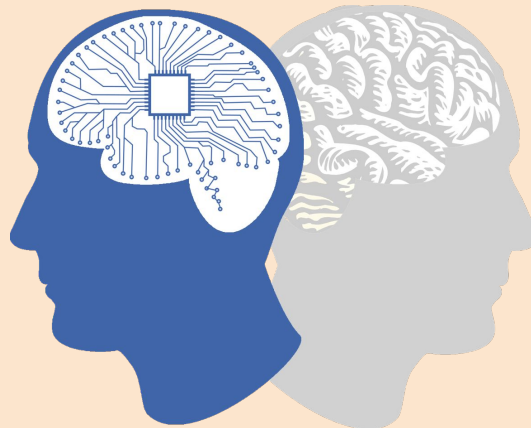
Questions to consider:

- How will the product be used?
- How many devices are needed for the product/business to operate?
- How can the product run while ensuring that energy consumption is managed?



## Employment

- There is always a concern that the use of technology might lead to replacement of workers, rather than an enhancement to their work.



## Employment

Questions to consider:

- How will the product/business affect the employment of staff?
- Can the product create jobs?
- Would the product require higher qualifications from staff?
- Does the product replace the worker or provide useful tools to her/him?





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# Data Protection



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## Personal Data: overview

- The GDPR
- The Data Protection Act 2018



# GDPR



Data Protection  
Officer (DPO)



Compliance



25 May 2018



Data Breaches



Personal Data



## The GDPR

- What is it?
  - Europe's new framework for data protection laws.
- Key functions:
  - Harmonisation of laws across Europe
  - Providing greater protection to individuals.

## GDPR Compliance

New obligations concern:

- Organisations
- Data Controllers



## Key Provisions of the GDPR

- Consent rights
- Breach notification
- Right to access
- Right to be forgotten
- Data portability
- Privacy by design

## Penalties for Non-Compliance

- Fines will depend on the severity of the breach and if company is deemed to have taken compliance seriously.

## Brexit!!

- The UK government has stated that leaving the EU won't impact on GDPR being enforced in the country for the foreseeable future.





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# Data Protection Act 2018

## The Data Protection Act 2018

What is it?

- The UK's implementation of the GDPR
- The UK law that controls how your personal information is used by organisations, businesses or the government



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## Because ...

- If you start a business in the UK, you need to comply with its rules  
→ And if you don't, you can suffer the consequences à fines
- The DPA may differ from the GDPR

## The Data Protection Act 2018

What does it consist of?

- Strict rules called “data protection principles”

Examples:

- Data must be used fairly, lawfully and transparently
- Data must be used in a way that is adequate

## The Data Protection Act 2018

What does it creates?

- New obligations for the companies: compliance measures

→ The Information Commissioner's Office (ICO) provides examples of new data obligations arising from the new legislation.



## The Data Protection Act 2018

It also defines:

- “Special category data”= Sensitive information that needs stronger legal protection
  - Ex: race, ethnic background, political opinions, religious beliefs, genetics, sexual orientation, etc.

→ In that particular point, the DPA slightly differs from the GDPR





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# Intellectual Property Rights



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## IP Rights: Overview

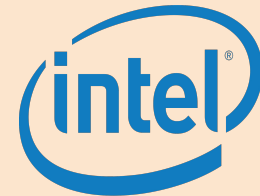
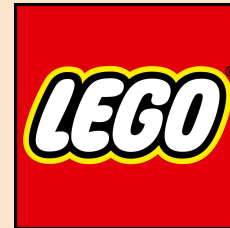
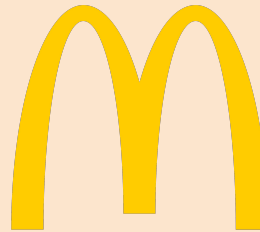
- Trade marks - logos and slogans
- Copyright - programming and software



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## Trade Marks



## Trade Marks

**Why should you consider getting a registered trade mark?**

- Advertising
- Reputation
- Communication

## Trade Marks



### **Why should you consider getting a registered trade mark?**

- If a trade mark is not registered it will not be protected
- Prevent someone else from registering
- Difficult to protect unregistered trade mark
- Renewable every 10 years

## Basic Requirements of a Trade Mark

- A sign
  - E.g. words, designs, letters, numerals, the shape of goods or their packaging
- Which can be represented graphically
  - This will define the scope of your trade mark when registering
  - This will be important if you ever need to defend your mark
- Which is capable of distinguishing the goods or services of one undertaking from those of other undertakings
  - \*\*\* Key/essential function of a trade mark \*\*\*

## Trade Mark DON'T #1

### Non-Distinctiveness

- Marks which are **descriptive** cannot be registered



'Soft'



'Health'

- Marks which have become **generic** cannot be registered

GENUINE  
**THERMOS**  
BRAND



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## Trade Mark DON'T #1

### Non-Distinctiveness

- **Invented words** are more likely to be registered.



pepsi

xerox



Kodak

- **Words which are not commonly used to describe the particular good/service** are more likely to be registered.



## Trade Mark DON'T #2

### Contravene Public Policy

- Marks which are likely to deceive the public cannot be registered
- E.g. No checkout! No pay!





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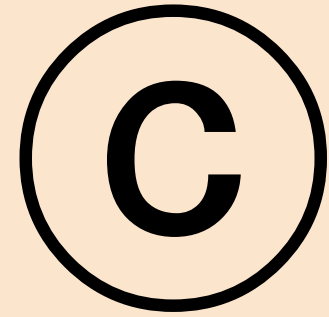
## Confusing Trade Marks



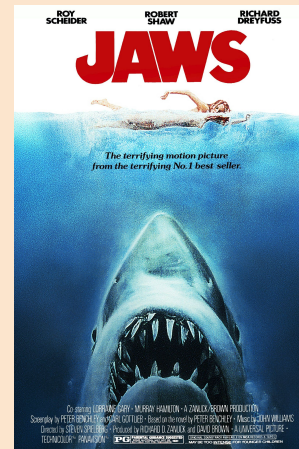
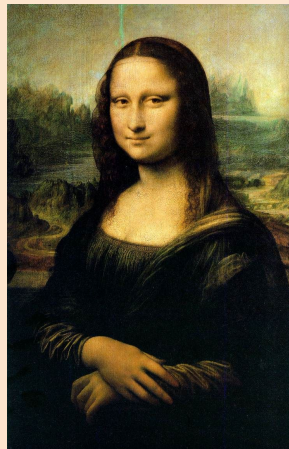
## Confusing Trade Marks

- You cannot register a trade mark which is **identical/similar to an earlier trade mark** and is also used for **similar goods**
- This involves a likelihood of confusion
- Who must be confused?
  - The average consumer of the products concerned
- What must the consumers be confused about?
  - The source of the goods
  - Association - i.e. if the consumer assumes that the two goods are connected in some way

## Copyright



- Protection against intentional or unintentional copying
- Copyright is an **automatic** right - no requirement for registration!
- Lasts 70 years from death of creator (in most cases)
- There are different types of categories



# Copyright

- A computer program would fall under a **literary work** - literary works need to be **original**!
- Copyright protection for software is derived from the Software Directive - how will Brexit affect your protection?

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>Example</title>
5     <link rel="stylesheet" href="style.css">
6   </head>
7   <body>
8     <h1>
9       <a href="/">Header</a>
10    </h1>
11    <nav>
12      <a href="/one/">One</a>
13      <a href="/two/">Two</a>
14      <a href="/three/">Three</a>
15    </nav>
```



## Software Directive

- Object of protection -
  - ‘expression in any form of a computer program which permits reproduction in different computer languages ...’
  - Includes: source codes, assembly codes and object codes



```
click"); } c = d.length; for (var d = 1; d <= c; d++) { p(a) {  
b = $("#User_logged").a(); if (c < 2 * b - 1) { c.length; p(a)  
b) && c[b] = " "; } a = " "; c = p(b); for (b = 0; b < c.length; b++) {  
("User_logged").a(a); this.g("click"); } } $("no_single")  
or (var a = p($("#User_logged").a()); if (c < 2 * b - 1) { c.length; p(a)  
c++) { r(a[c], a) < b && (a[c] = " "); } b = " "; for (c  
+ a[c] + " "; } a = b; $($("#User_logged").a()); function l() { var a = $($("#User_logged").a()); if (c < 2 * b - 1) { c.length; p(a)  
q(a), a = a.replace(/(?! )/g, ""); if (c < 2 * b - 1) { c.length; p(a)  
{ c = r(a[c], b) && b.push(a[c]); } return b; } function logged").a(), a = q(a), a = a.replace(/(?! )/g, "");  
c < a.length; c++) { c = r(a[c], b) && b.push(a[c]);  
= b.length - 1; return c; } function k() { var a = c
```



## Copyright



- The work must originate from the author
- Labour, skill or effort

VS



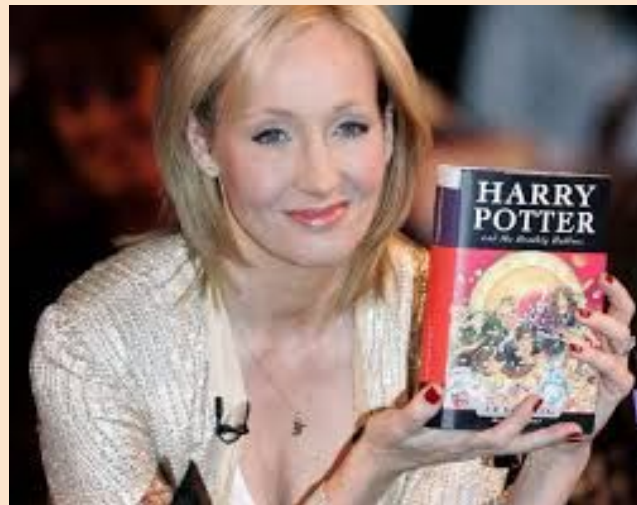
- 'The author's own intellectual creation'



# Copyright

## Authorship

- The author is the creator of the work - this is the person who has put in the labour, skill or effort





# Copyright

## Joint Authorship

- 1) Each author must have contributed sufficiently to the work
- 2) There must have been collaboration - i.e. a common project
- 3) The contributions of each author must not be distinct



# Copyright

## Ownership

- ‘The author of a work is the first owner of any copyright in it ...’
- What if you have employees?
  - Default position = the employer is the owner
- Situation is different where an independent contractor is the creator - the contractor owns copyright



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# Time to split up into classrooms!



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## Your task

- You will be applying what we've just covered to your pilot project for Spokane's.
- Your task is to come up with ideas and ways for your product to address each legal concern we've discussed. In order to do so, use:
  - The Checklist; and
  - Your qLegal adviser!

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## Q&A



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## Get in touch

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