OUTSTANDING TEACHING, LEARNING AND ASSESSMENT
TECHNICAL SKILLS NATIONAL PROGRAMME

Legal Impact of Computing – workshop notes and session checklist (supports the presentation)
Created by: qLegal for ADA National College for Digital Skills
January 2019
Legal Impact of Computing  
Workshop at Ada National College for Digital Skills

Workshop Outline  
1st hour all together

INTRODUCTION (5 minutes)
- Introduction of the team and of qLegal  
- Introduction to the topic ‘Legal Impact of Computing’

FIRST TOPIC - ETHICAL IMPLICATIONS OF COMPUTING (10 - 15 minutes?)
- Ethical questions provide an overview of the questions that should be in the developers’ mind while deciding on key features of the business and product.  
- Ethical issues addressed:
  o Use and misuse of personal data  
  o Prevention of misuse of the product  
  o Environmental concerns  
  o Employment

SECOND TOPIC - DATA PROTECTION (30 minutes?)
- The GDPR  
- The Data Protection Act 2018

10-minute break + time to split into classrooms

2nd hour - split up into classes

THIRD TOPIC - IP RIGHTS (15 MINUTES)
- Trade mark (branding and slogans)  
- Copyright (programming and software)  
- Patents (some discussion)  
- We can give the students handouts providing a more in depth look at IP rights.

STUDENT GROUPS WORK ON PROPOSAL (25 MINUTES)
- Students work together to come up with a proposal, taking into account everything covered before.  
- Checklists can be used to ensure they take into account as much as possible.

GROUPS PROPOSE THEIR IDEAS (15 MINUTES)
• The students present to their given qLegal adviser.

**Q&A WITH QLEGAL ADVISER (5 MINUTES)**

• Students can ask questions to the student adviser about the workshop or about the adviser’s background in general (e.g. career path, academic background, etc.)

**Workshop Content Notes:**

1. **ETHICAL IMPLICATIONS**

**Use and misuse of personal data**

- Records of user data - necessary to keep records of everything. But if used incorrectly, personal information of users could be exposed.
- It’s necessary for a business to make sure these records are protected.
- Questions that might arise:
  - Are the log files/records sufficiently protected?
  - Who is authorised to access them?
  - How long will the records be kept?
  - Will the records be permanently deleted?

**Prevention of misuse**

- The software engineer has to anticipate misuse and decide to what extent prevention features should be implemented.
- For example, Amazon Go has taken a relaxed attitude towards the prevention of shoplifting. It trusts its algorithm so much that if the app charged for an item that the customer did not take, an automatic refund is given with no proof required.
- What misuse could arise? Is the misuse so large that design should be adapted to prevent such misuse? Or should the quality of the product be prioritised?

**Environmental concern**

- There are many advantages to using technology (e.g. less paper usage)
- However, there are disadvantages. Large use of computers and technology results in higher energy usage. How would the business be set up?
- Amazon Go uses a large number of cameras in order to monitor each shopper (e.g. distance from a grocery item, which item it took, facial recognition to keep track, sensors on the store shelves, entry gates with barcode scanner).
- How can the product run while ensuring energy consumption is managed?
- Device life span must be taken into account when purchasing devices to implement
Employment

- To what extent will the product have an effect on the employment of staff?
- Can the product create jobs? Would the jobs require higher qualifications for the staff?
- Does the product replace the workforce or enhance it?
- What is the appropriate balance?

2. DATA PROTECTION

GDPR

About GDPR - Europe is now covered by the world's strongest data protection rules. The mutually agreed General Data Protection Regulation (GDPR) came into force on May 25, 2018, and was designed to modernise laws that protect the personal information of individuals. The GDPR is Europe's new framework for data protection laws – it replaces the previous 1995 data protection directive. The EU's GDPR website says the legislation is designed to "harmonise" data privacy laws across Europe as well as give greater protection and rights to individuals.

GDPR Compliance - Data breaches inevitably happen. Information gets lost, stolen or otherwise released into the hands of people who were never intended to see it -- and those people often have malicious intent. Under the terms of GDPR, not only will organisations have to ensure that personal data is gathered legally and under strict conditions, but those who collect and manage it will be obliged to protect it from misuse and exploitation, as well as to respect the rights of data owners - or face penalties for not doing so.

Key Provisions of the GDPR:
The GDPR defines personal data as any information related to a natural person (data subject) that can be used to directly or indirectly identify that person. It can be anything from a name, a photo, an email address, bank details, posts on social networking websites, medical information, or even a computer IP address. Under such a broad definition, enterprises must take documented steps to limit access to all personal data to only authorized and credentialed employees with job roles that specifically require access to that data.

Specific Provisions also include;
- Consent rights
- Breach notification
- Right to access
- Right to be forgotten
- Data portability
- Privacy by design
- Enforcement of Data Protection Officers
Penalties and fines - Failure to comply with GDPR can result in a fine ranging from 10 million euros to four per cent of the company's annual global turnover, a figure which for some could mean billions.
Fines will depend on the severity of the breach and on whether the company is deemed to have taken compliance and regulations around security in a serious enough manner.

Impact of Brexit - The UK is set to leave the EU on 29 March 2019, a little over ten months after GDPR comes into force. The UK government has said this won't impact on GDPR being enforced in the country, and that GDPR will work for the benefit of the UK despite the country ceasing to be an EU member. So Brexit is unlikely to have any impact on an organisation's GDPR compliance requirements.

Data Protection Act 2018

The Data Protection Act 2018 controls how your personal information is used by organisations, businesses or the government. It is the UK’s implementation of the General Data Protection Regulation (GDPR).

Strict rules called “Data protection principles” must be followed by every person that use personal data. Indeed, everyone responsible for using personal data must make sure the information is:
- used fairly, lawfully and transparently
- used for specified, explicit purposes
- used in a way that is adequate, relevant and limited to only what is necessary
- accurate and, where necessary, kept up to date
- kept for no longer than is necessary
- handled in a way that ensures appropriate security, including protection against unlawful or unauthorised processing, access, loss, destruction or damage

Some information are considered as “sensitive information” and need stronger legal protection, such as :
- Race
- ethnic background
- political opinions
- religious beliefs
- trade union membership
- Genetics
- biometrics (where used for identification)
- Health
- sex life or orientation

3. INTELLECTUAL PROPERTY RIGHTS

Trade mark (branding and slogan)

- *** most important function of a trade mark → the trade mark MUST enable the consumer to identify the goods/services of one source from another source ***
  o The consumer must be able to identify the source without confusion.
  o It is important that when the students are designing their trade mark to keep
this in mind as this will determine whether their trade mark will be able to be registered or not.

- Why is it important to have a trade mark?
  - Trade marks can be used in advertising as a sales or commercial strategy.
  - Trade marks can be used to build up a reputation for the goods/services, this in turn can attract consumers and retain their loyalty.
  - Trade marks can also used be as a tool to communicate the image of your brand to consumers.
- Trade mark ‘dos’: Basic requirements (s. 1(1) Trade Marks Act 1994), a trade mark must be:
  - A sign;
    - E.g. words, designs, letters, numeral or the shape of goods or their packaging.
    - UK Intellectual Property Office recently approved Amazon Go’s slogan ‘No lines. No checkout. (No, seriously.)’ as a trade mark.
  - Which can be represented graphically; and
    - It is important to represent your mark accurately so that when third parties register a mark they can clearly ascertain whether their mark will conflict with yours.
    - This will also help you to defend your trade mark in the case of a third party trying to register a similar mark.
  - Which is capable of distinguishing the goods or services of one undertaking from those of other undertakings.
    - This requirement stresses the importance of the key function of trade marks.
- Trade marks ‘don’ts’ #1: non-distinctiveness
  - Relates to the key function of trade marks.
  - Marks which are descriptive cannot be registered. E.g. soft for tissues, health for medical services.
  - Marks which have become generic cannot be registered. E.g. Thermos.
  - Invented words are more likely to be registered. E.g. Pepsi, Kodak, Xerox.
  - Words which are not commonly used to describe the particular good/service are more likely to be registered. E.g. Apple for electronic goods.
- Trade marks ‘don’ts’ #2: contravene public policy
  - Mark which are likely to deceive the public cannot be registered E.g. No checkout! No pay! - this is deceptive because even though the consumers do you have to go to the checkout they will still have to pay for their purchases.

Copyright (computer program, coding, software)

- Copyright is an automatic right.
- Computer program would fall under the category of a literary work - computer programs and preparatory design material for computer programs.
- The copyright protection for software under the CDPA 1988 is derived from the Software Directive, therefore, in accordance with EU law - could possibly discuss how brexit will affect the protection of the software.
- Protection for computer programs includes source code, assembly code and object code.
- The object of protection conferred by the Software Directive is the ‘expression in any form of a computer program which permits reproduction in different computer languages, such as the source code and the object code’.
- Needs to be original - i.e. UK law requirements - work must originate from the author and there must be labour, skill or effort; EU law requirements - ‘European standard’ only requires ‘the author’s own intellectual creation’.
- Point of consideration for the students is the authorship and ownership
  - The author is the creator of the work which is the person who has put in the labour and skill.
  - Works can be of joint authorship - three requirements:
    - ‘Each author must have contributed sufficiently to the work;
    - There must have been collaboration; and
      - They must have been working towards a common project.
    - The contributions of each author must not be distinct.’
      - E.g. if a different person writes each chapter of a book, they will not have joint authorship, each chapter will be a separate copyright work.
  - Ownership in terms of employment
    - “Where a literary, dramatic, musical or artistic work is made by an employee in the course of his employment, his employer is the first owner of any copyright in the work subject to any agreement to the contrary.”
    - Ask the students to consider if they will be hiring anybody to do this project with them, and if so, what if an employee also wants to be an owner of the copyright?
    - The ‘agreement to the contrary’ can be included in the contract of employment.
## Legal Impact of Computing: Checklist

<table>
<thead>
<tr>
<th>Areas of law</th>
<th>Categories</th>
<th>Points to address (for your system, how do you prevent/mitigate against the issue)</th>
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</thead>
<tbody>
<tr>
<td>Ethical considerations</td>
<td>Prevention of misuse of product</td>
<td>❑ We have measures in place that prevent/mitigate against product misuse.</td>
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<td>Environmental concerns</td>
<td>❑ We have measures preventing our product from harming the environment.</td>
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<td>Employment concerns</td>
<td>❑ We have considered the effects our product will have on employment and have</td>
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<td>considered ways in which it may be used as a tool to employees.</td>
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<td>Data protection</td>
<td>The GDPR</td>
<td>❑ We have a clear understanding of what personal information will be collected.</td>
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<td>❑ We have requested for consent in a clear and prominent manner.</td>
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<td>❑ We notify our users of their right to withdraw consent.</td>
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<td>❑ We manage consent effectively, keeping records and frequently reviewing our</td>
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<td>relationship with the users.</td>
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<td>❑ We have measures that allow us to respond to consent withdrawals in a timely</td>
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<td>manner.</td>
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<td>❑ We have measures that allow users to access their data when they wish.</td>
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<td>❑ We have measures that help users exercise their “right to be forgotten”.</td>
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<td>❑ For the purpose of data portability, we will provide users with their data</td>
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<td>in a way that is commonly used and machine readable.</td>
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<td>❑ We have measures in place that will allow us to handle notification of</td>
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<td>any breach(es) in a timely manner.</td>
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<td>Data Protection Act 2018</td>
<td>❑ We have measures that record all the personal information we hold, how we</td>
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<td>hold it, where it came from, who we share it with and who is responsible for it.</td>
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<td>❑ We continuously review our privacy notices to ensure they are clear, accessible</td>
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<td>and current.</td>
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<td>❑ We have appointed a Data Protection Officer who will be in charge of ensuring</td>
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<td>our compliance.</td>
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<td>❑ We will keep a log of all processing operations (e.g. alterations, access to</td>
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<td>records, erasures, etc.)</td>
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<td>Intellectual Property Rights</td>
<td>❑ We have an appropriate policy when it comes to handling personal, sensitive</td>
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<td>Trade mark</td>
<td>information.</td>
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<td>Copyright</td>
<td>❑ We have a business name/logo and copies of them.</td>
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<td>❑ Our business name/logo helps distinguish our product from other products.</td>
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<td>❑ Our business name/logo is not descriptive of our product and it is not generic.</td>
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<td>❑ Our business name/logo does not deceive the public.</td>
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<td>❑ Our business name/logo is unlikely to cause any confusion among the public.</td>
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<td>❑ Our software code is original.</td>
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<td>❑ Our software code was created ourselves with our own labour, skill or effort.</td>
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<td>❑ OR, our software code was created by an employee, who was acting in the</td>
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<td>course of her/his employment.</td>
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