OVER 18's

YOUR FUTURE IS AT YOUR FINGERTIPS

Develop your **cyber skills**

CYBER CHOICES

www.cyberchoices.uk

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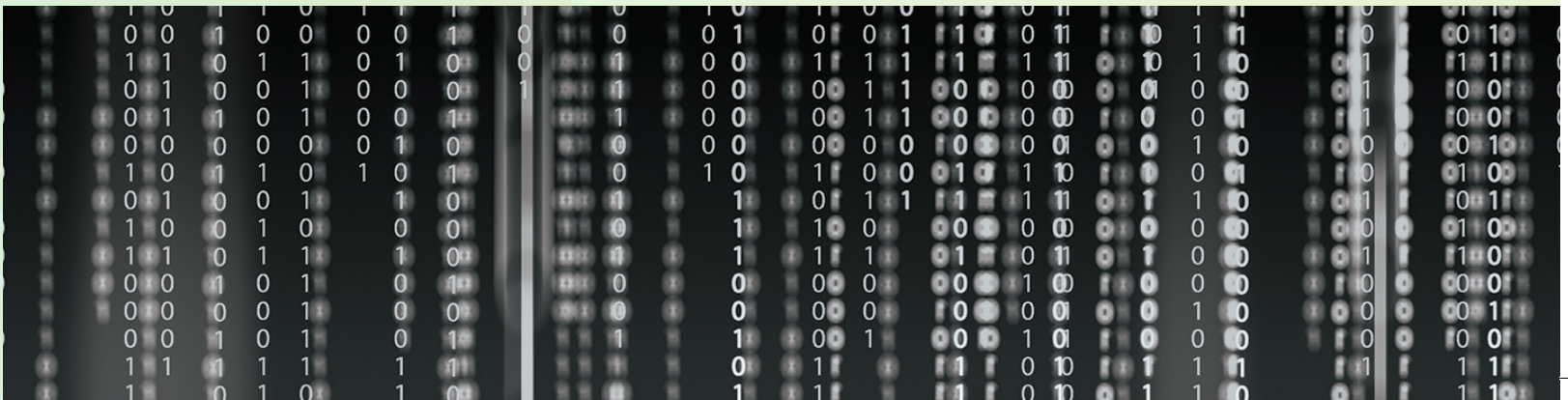
Hello

THANK YOU FOR PICKING UP THIS BOOKLET

It's been designed to introduce the Cyber Choices programme and explain how it can help you find exciting and legal ways to develop your cyber skills. We hope it's an interesting read…

Cyber Choices is a programme delivered by the Regional Cyber Choices Network and Local Police Force Cyber Teams, co-ordinated by the National Crime Agency.

The focus of the Cyber Choices network is on cyber dependent crime e.g. illegal hacking of computers and networks, denial of service and the writing / distribution / deployment of malware.

Introduction to Cyber Choices

The key aims are...

- Explaining the difference between legal and illegal cyber activity.

- Encouraging individuals to make informed choices in their use of technology.

- Increasing awareness of the Computer Misuse Act 1990.

- Promoting positive, legal cyber opportunities.

A gamer might think a DDoS attack on a fellow gamer is a joke, however it is a cyber crime. A hacker may take down a service without appreciating the serious consequences of their actions.

People with an interest, talent or curiosity in gaming, coding or other cyber related disciplines can find themselves in a position where, unknowingly or otherwise, they have broken the law. We want to prevent this.

Cyber tools and techniques can be used legally or illegally. This booklet explains the laws under the Computer Misuse Act to help readers understand what the boundaries are. It also provides details of some available resources where cyber skills can be used legally.

The resources within this booklet provide a good start for developing skills. Internet searches will help you find many more similar sites, with a wealth of free learning resources and challenges. Many of these are aimed at encouraging people into a legal career in the cyber industry because there is a huge shortage of people in this sector. This means that jobs, from entry level and upwards, are well paid with fantastic prospects.

Surely a much better option than a criminal record.

The Computer Misuse Act 1990

Section 1
Unauthorised access to computer material.

Section 2
Unauthorised access with intent to commit or facilitate commission of further offences.

Section 3
Unauthorised acts with intent to impair, or with recklessness as to impairing, operation of computer.

Section 3ZA
Unauthorised acts causing, or creating risk of, serious damage.

Section 3A
Making, supplying or obtaining articles for use in offence under section 1, 3 or 3ZA.

A criminal record could affect your education and further career prospects so get to know the legal boundaries whilst online.

Read more on page 12

For example

👉 You watch your friend enter their username and password. You remember their login details and without their permission, later login and read all their messages.

👉 Your friend leaves their tablet on the sofa. Without their permission, you access their gaming account and buy game credits with the attached credit card.

👉 You are playing an online game with a friend who scores higher than you. You use a 'Booter' tool knowing it will knock them offline, so you can win the game.

👉 You hack a phone company. Your hack stops some people phoning the Police when they are in danger.
You didn't mean for this to happen but you were reckless.

👉 You download software so you can bypass login credentials and hack into your friend's laptop, however you've not had a chance to use it yet.

Resources

The Cyber Choices website gives more information on cyber crime and preventing young people from committing it...
www.cyberchoices.uk

ONLINE ACTIVITIES

There are fun and challenging online activities available to legally test and develop your cyber skills whether or not you are considering a career in tech. We have provided a range of these over the next few pages.

CODING

If you have an interest in coding, there are lots of online resources and clubs where you can build upon your abilities.

Codecademy
Filled with online resources to improve your knowledge.
www.codecademy.com

Free Code Camp
Thousands of free videos, articles, and interactive coding lessons.
www.freecodecamp.org

Develop skills

SKILLS CHALLENGE
Online challenges to test and sharpen cyber skills.

Cyber Security Challenge
Competitions designed to test cyber skills, created by industry professionals looking for the next generation of cyber defenders.
www.cybersecuritychallenge.org.uk

GOVERNMENT PROGRAMMES
Government programmes offering financial support and work experience in cyber security.

CyberFirst Bursary and Degree Apprenticeship
Undergraduates can apply for 4,000 per year financial assistance to a maximum of four years and paid cyber security training each summer to help kick start their career in cyber. Degree Apprenticeships allow undergraduates to work at GCHQ whilst studying for a full BSc Hons in cyber security.
www.ncsc.gov.uk/cyberfirst/overview

Online training

There are online platforms available to sharpen cyber skills.

Hack The Box
A gamified and hands-on training platform to learn and advance penetration testing and cyber security skills.
www.hackthebox.eu

Vulnhub
Provides online materials allowing practical hands-on experience with digital security, computer applications and network administration tasks.
www.vulnhub.com

Cybrary
Online IT and cyber security training platform. Self-paced learning, ideal if you want to grow your skill set.
www.cybrary.it

SANS Cyber Aces
A free online course that teaches the core concepts needed to assess and protect information security systems.
www.cyberaces.org

Further education

If you have an interest in furthering your learning, the following resources provide a wealth of information.

NCSC
The National Cyber Security Centre website contains a lot of information on both academic and professional qualifications in cyber security.
www.ncsc.gov.uk/section/education-skills/11-19-year-olds

UCAS
The Universities and Colleges Admissions Service has full details of university courses and entry requirements. The site also details apprenticeships. There are a number of institutions offering cyber security as a specialism.
www.ucas.com

Future careers

Skills in coding, gaming, computer programming, cyber security or anything tech related are in high demand. There are many careers and opportunities available to someone with an interest in these areas.

TechFuture Careers
A great place to find out about the exciting tech roles available in companies from loads of different sectors. Whether you want to work in fashion, music, media or business, there's a tech role for you.
www.tpdegrees.com/careers

Girl Geeks
Supports untapped talent and females in STEM (Science, Technology, Engineering and Maths) through offering inspiration, connections and opportunities.
www.girlgeeks.uk

Inspired Careers
An innovative virtual hub that allows all of the job roles and career paths open. There are currently 87 different roles listed in cyber security.
www.inspiredcareers.org

CREST
An international not-for-profit accreditation and certification body that represents and supports the technical information security market. CREST has produced some careers guidance for those that are looking to go into cyber security.
www.crest-approved.org/ professional-development/crest- careers-guides/index.html

Curious to know how much you could earn working in cyber security?
www.itjobswatch.co.uk/jobs/uk/cybersecurity.do

All the third party websites listed are publicly available for personal development. They are not necessarily endorsed, supported or monitored by the NCA or UK law enforcement.

All links and web addresses were checked and verified to be correct at the time of publication.

We are the future

Traineeships
These are designed to help people who want to get an apprenticeship or job but don't yet have appropriate skills or experience.
www.gov.uk/government/ collections/traineeships- programme

Apprenticeships
These are available through college websites and the Government site below.
www.findapprenticeship. service.gov.uk/ apprenticeshipsearch

Bug Bounties
Many companies now offer 'bug bounty' schemes. They offer financial incentives for hackers who find and report vulnerabilities in their systems so they can be rectified. These can be a great way for hackers to challenge their skills whilst making money. However it is essential that the terms and conditions of these schemes are read and strictly adhered to. Failure to follow these or to report vulnerabilities correctly can result in individuals inadvertently committing crime.

And finally

We hope you found this Cyber Choices information useful. Used legally, skills in digital technology and computing can lead to an exciting and well paid career. Millions of cyber professionals are already needed and demand will only increase in the future.

Whilst the prospect of pushing boundaries with your skills may seem exciting, an activity may seem ok because "everyone else is doing it", or you have gained credibility following certain actions, UK law enforcement takes cyber crime seriously. So…Don't risk getting a criminal record. Don't risk throwing away a bright future by breaking the law.

Consequences of breaking the Computer Misuse Act 1990 may include:

- Receiving a visit and warning from the police or NCA officers
- Being arrested
- Getting a criminal record
- Having devices seized
- Being banned or limited in your internet use
- Being expelled from school
- Not being able to get the job you want
- Not being able to travel to certain countries

…or all of the above!

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Get in touch

Cyber Choices is a programme delivered by the Regional Cyber Choices Network and Local Police Force Cyber Teams, co-ordinated by the National Crime Agency.

If you would like any further information or advice on Cyber Choices, please visit us at **www.cyberchoices.uk** for more resources and our contact details.

Notes

www.cyberchoices.uk

Helping you choose a positive and legal path