

Cyber Crime

<b>Definition:</b> <ul style="list-style-type: none"><li>- criminal / illegal activity</li><li>- involves unlawful access to computer system</li><li>- committed on internet</li><li>- steals data/information</li></ul>		<b>Example:</b> <ul style="list-style-type: none"><li>- Stealing credit card information</li><li>- Breaking into government website</li></ul>		
History:				
<b>1<sup>st</sup> cybercrime:</b> <ul style="list-style-type: none"><li>- France, 1820</li><li>- person details: Name: Joseph Manie Job; textile engineering</li></ul>		<b>1<sup>st</sup> spam email</b> <ul style="list-style-type: none"><li>- 1978</li></ul>	<b>1<sup>st</sup> virus:</b> <ul style="list-style-type: none"><li>- Installed on Apple Computer</li><li>- 1982</li></ul>	
<b>Category</b> of Cyber Crimes		<b>Types</b> of Cyber Crimes (Based on Victims)	<b>Cause</b>	<b>Characteristics</b>
<b>Device as</b>	<b>Weapon</b> (Device as)	<b>4 victims</b>  Crime Against <ul style="list-style-type: none"><li>1) Individual</li><li>2) Property</li><li>3) Organization</li><li>4) Society at Large</li></ul>	<ul style="list-style-type: none"><li>1) Cyber war</li><li>2) Money income / Financial gain</li><li>3) Take revenge / insider threats</li><li>4) Political Campaign</li><li>5) Having fun</li><li>6) Recognition and achievement</li></ul>	<ul style="list-style-type: none"><li>1) Easy access to system</li><li>2) 24/7 opportunity to do crime</li><li>3) Less risk and cost</li><li>4) More profit</li><li>5) Can't detect criminal's location easily</li><li>6) Proof of crime – damaged easily</li><li>7) Can do crime internationally</li><li>8) Can hide/fake own identity</li></ul>
<b>Target</b>				
Use computer to attack another one	Use computer to commit real world crime			
Ex: Hacking, virus attacks	Ex: cyber terrorism, credit card fraud			

Prevention:

Cyber Laws in Pakistan:		Safety tips:	Cyber Security:
a) Electronic Transaction Ordinance 2002: <ul style="list-style-type: none"><li>- 1<sup>st</sup> IT Law (now not applicable)</li><li>- Protects Pakistani E-commerce</li><li>- Protects Pakistan’s critical infrastructure</li><li>- Taken from foreign law</li></ul>	b) Electronic/Cyber Crime Bill 2007 <ul style="list-style-type: none"><li>- Promoted by the president of Pakistan</li><li>- Applicable from 31 December 2007</li><li>- Deals with:<ul style="list-style-type: none"><li>1) Cyber terrorism</li><li>2) Data damage</li><li>3) Electronic fraud</li><li>4) Spoofing</li><li>5) Unauthorized access to code</li></ul></li><li>- Punishment: globally and locally given<ul style="list-style-type: none"><li>1) Imprisonment</li><li>2) Fine</li></ul></li><li>- Responsible: FIA (Federal Investigation Agency)</li><li>Investigate and charge case</li></ul>	1) Use antivirus software 2) Insert firewalls 3) Uninstall unnecessary software 4) Maintain backup 5) Check security settings 6) Never give information to strangers 7) Learn more about internet privacy	<ul style="list-style-type: none"><li>- Branch of computer security</li><li>- Related to internet</li></ul> <b>Objective:</b> <ul style="list-style-type: none"><li>- Establish rules to use against attack over the internet</li></ul> <b>Advantages:</b> <ul style="list-style-type: none"><li>- Save from critical attacks</li><li>- Safe browsing</li><li>- Secure incoming/outgoing data processing</li></ul>

Different types of cyber-crimes (and how done): 13

Virus Dissemination (Spreading)	Computer vandalism	Blackmailing	Financial Crime	Credit Card Fraud	Cyber Pornography	Spoofing	Email Spoofing	Cyber terrorism
<ul style="list-style-type: none"><li>What is virus?</li><li>Malicious software that attaches itself to another software</li></ul> <p><b>Solution:</b></p> <ol style="list-style-type: none"><li>Keep regular backup of important files</li><li>Be careful about opening email attachment</li><li>Be careful of attachments that has .exe, .vbs, .scr, .vbe, .dll, .pif, .drv, .bin, .nws, .bat, .ocx, .shs etc file extension.</li></ol>	<p><b>Def:</b> Damaging/destroying data by transmitting virus rather than stealing</p> <p><b>Prevention:</b></p> <p>Not giving permission to software without reading the agreement</p>	<p>Taking Control of FB account by sending phishing link or after mobile lost/theft and demand money.</p> <p>Defacing by Photoshop or other editing tools and posted in social media/YouTube and blackmailing.</p>	<p>giving attractive advertising on the website or enticement by email or social media</p> <p>➤ Electronic Card Fraud</p> <p>➤ Visa Processing fraud</p>	<p>For personal reasons, an individual uses another individual's credit card</p> <p>The owner of the credit card and the card issuer are unaware of the fact</p> <p><b>Occurs in</b></p> <ul style="list-style-type: none"><li>Online banking</li><li>Online shopping</li></ul> <p><b>Solution:</b></p> <ol style="list-style-type: none"><li>One can't use others credit card because of<ol style="list-style-type: none"><li>Mobile security code</li><li>2 step verification</li></ol></li><li>Ethical conduct</li></ol> <ul style="list-style-type: none"><li>Enforced by bank authority</li></ul>	<p>Pornographic pictures, photos, and writings (by exchange of money)</p> <p>Online Service</p> <p>Live Video Chat</p>	<p>Send fake mail</p> <p>Done by faking/hiding identity</p> <p>Ask to provide sensitive data</p> <p>Find personal/financial details</p> <p>3 ways:</p> <ol style="list-style-type: none"><li>Email spoofing</li><li>IP spoofing</li><li>Fake identity</li></ol> <p><b>Solution:</b></p> <ol style="list-style-type: none"><li>Keeping computer system updated</li><li>Using a good antivirus software</li><li>Don't open the mail from unknown sender</li><li>Ignore mails that has<ul style="list-style-type: none"><li>No sender names</li><li>Your name in sender details</li></ul></li></ol>	<p><b>Def:</b> A spoofed email is one in which e-mail header is forged so that mail appears to originate from one source but actually has been sent from another source</p> <p><b>Hacking</b></p> <p><b>Def:</b> Unauthorized access to computer system by a hacker</p> <p>3 types of hackers:</p> <ol style="list-style-type: none"><li>White hat hackers</li><li>Black hat hackers</li><li>Gray hat hackers</li></ol>	<p><b>Def:</b> intentional use of computers, networks, and public internet to cause destruction and harm for personal objectives.</p> <p><b>Purpose of using social media:</b></p> <ul style="list-style-type: none"><li>Motivation</li><li>Recruitment</li><li>Training</li><li>Fund Collection</li><li>Claim of attack</li></ul> <p><b>Prevention Law:</b></p> <ol style="list-style-type: none"><li>Punishment: 7 Iranian's work for their govt Reason: Hacking</li><li>Punishment: sent to jail Place: Rawalpindi Reason: blackmailing on social media</li></ol>
	<p><b>Software piracy</b></p> <p><b>Def:</b> Theft of software through illegal copying of genuine programs</p> <p><b>Cause:</b> not using original software (costly)</p> <p><b>Prevention:</b> serious attempt taken by the organization against the people involved in the distribution of pirated software</p>	<p>Mostly committed by the young to take revenge after breaking up relations.</p>			<p>manages to get nude pic or video of victim</p> <p>demands money</p> <p>Spreading hate speech</p> <ul style="list-style-type: none"><li>Attacking political/religious ideology</li></ul> <p>target: communal riot</p> <p>Hate speech to any community</p>			