

## Chapter 5: Secure Web Use

### Secure Websites Identification

- "Secure" sites prevent unauthorized access to information
- How to identify Secure Sites
  - ↳ Lock icon on status or address bar
  - ↳ HTTPS: url beginning

### Pharming

- Scamming (دخف!) concept using malicious code
- Installed on computer or server through hacking
- Misdirects users to fraudulent and fake websites

### Digital Certificates

- Electronic identity card
- Establishes your credential when doing business or other transaction on the web

### One-time password (OTP)

- Unique / time-sensitive password
- Valid for only one login session
- Must be used within specific time period
- Usually sent via SMS or email

### Cookies

- Small text message given to web browser by web server
- Identify users
- prepare customized pages
- Save site login info

### Types:

#### 1) Session Cookie

- Temporary memory
- until browser closes

#### 2) Permanent Cookie

- on the hard drive
- until expiry or delete

### Content Control Software

- Control what content can be viewed by users
- Control amount of time spent on Internet / Computer

### Internet Filtering Software

- limit / strict what a user can view on the internet

### Parental Control Software

- Restrict children as to what can be viewed, time spent, files and program can be accessed

## → Phishing

- Fake emails to steal info.
- Obtain passwords, credit cards, personal data
- Method: Fake websites that look legitimate

## → Pharming

- Redirecting to fake websites via malicious code
- Automatically redirects without requiring users to click a link

## → SSL (Secure Sockets Layer)

- Encryption protocol for secure communication
- protect data between browser and server

Indicator: HTTPS in URL, lock icon

- Encrypt sensitive info in transit

## → Digital Signature

- Electronic signature using encryption
- To verify sender identity and message integrity

## → Encryption

- Converting data into unreadable code
- Plaintext → Encryption → Ciphertext
- Protect confidentiality of data