



Technology in Action

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Ninth Edition

Technology in Action

Chapter 3

Using the Internet:

Making the Most of the Web's Resources

Chapter Topics

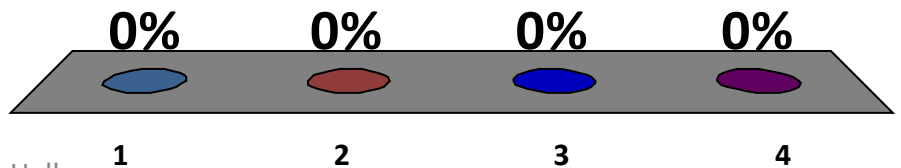
- The origin of the Internet
- The Internet and how it works
- Communicating and collaborating through the Internet
- Web entertainment
- Conducting business over the Internet: E-commerce

Chapter Topics (cont.)

- Accessing the Web: Web browsers
- Getting around the Web: URLs, hyperlinks, and other tools
- Searching the Web effectively

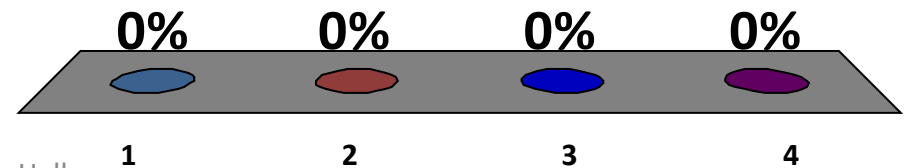
What is the primary method of electronic communication worldwide?

1. Email
2. Blogs
3. Twitter
4. Instant Messaging



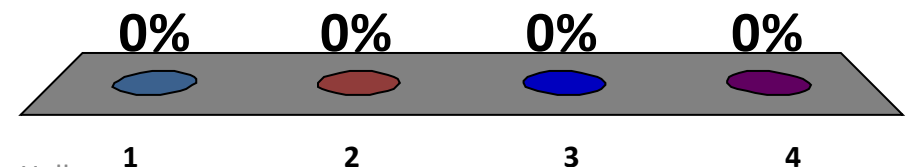
A is a personal journal posted on the web.

1. Podcast
2. Blog
3. Instant message
4. Wiki



What type of software allows users to locate, view, and navigate web pages.

1. Windows Operating Systems
2. Microsoft Office
3. Web Browsers
4. GUIs



Origin of the Internet

- Internet is a network of networks connecting billions of computers globally
- Developed while U.S. was in midst of Cold War with Soviet Union
- Created to respond to two concerns:
 - Establishing a secure form of military communications
 - Creating a means by which all computers could communicate

Origin of the Internet (cont.)

- Evolved from Advanced Research Projects Agency Network (ARPANET)
 - Vinton Cerf
 - Robert Kahn
- First communication occurred in 1969
- World Wide Web is subset of the Internet
 - Common protocols enable computers to talk to each other
 - Special links enable navigation

The Internet and How It Works

- Computer connected to the Internet acts in one of two ways:
 - Client is computer that asks for data
 - Server receives the request and returns data to the client

Communicating and Collaborating Through the Internet

- Different ways to communicate
 - Instant messaging
 - Group communications
 - Social networking
 - Web and video logs
 - Wikis
 - Podcasts and Webcasts

Web 2.0

- Describes evolved type of Web interactions between people, software, and data
- Classified as the *social Web*, in which user is also a participant
- Describes trend of new applications
- Hundreds of companies exist to help share, recommend, collaborate, create, and socialize

Social Networking

- Means by which people use the Internet to communicate and share information
 - Facebook
 - Twitter
- Networking in business community
 - Finding and filling job positions
 - LinkedIn is business-oriented network
 - Marketing and communicating with customers

I am comfortable being tagged in photos on social networking sites.

1. True
2. False



E-Mail

- E-mail is primary method of electronic communication worldwide
- Written message sent and received over the Internet
 - Fast
 - Convenient
 - More “private”
- Means of exchanging and collaborating on documents via attachments

E-Mail Etiquette Guidelines

- Be concise and to the point
- Use spell-check
- Avoid texting abbreviations
- Include meaningful subject line
- Use emoticons sparingly to convey emotion
- Include signature line with basic contact or corporate information

Types of E-Mail Accounts

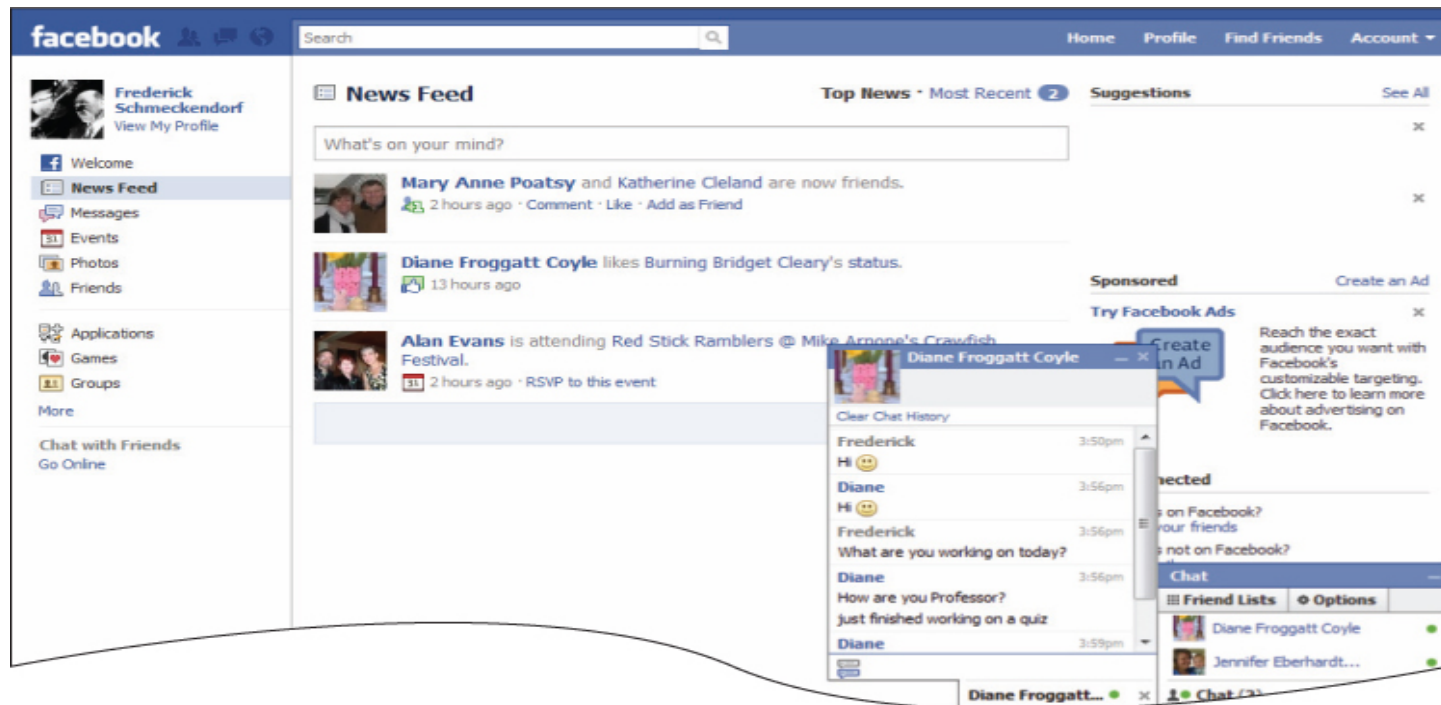
- E-mail client
 - Accessible only from computer on which email client software is installed
 - Microsoft Outlook
- Web-based e-mail client
 - Accessible from any device that can access the Internet
 - Yahoo! Mail, Hotmail, or Gmail

Instant Messaging

- Real-time, text-based conversations with others online
 - Personal and business uses
 - Students communicate with instructors
- IM services provide integration with social networks
- Chat with more than one person
- Many IM services offer audio chat
- Webcam allows video chats

Facebook Chat

Instant messaging services such as Facebook Chat enable you to have real-time online conversations.



Weblogs and Video Logs

- Weblog or blog is a personal log or journal posted on the Web
 - Single author
 - Arranged as entries on single page
 - Most recent entry on top
- Video log or vlog is personal journal that uses video as primary content
 - YouTube most popular video-sharing site

Wikis

- A Wiki is a type of Web site that allows users to change content
- Wikipedia uses wiki technology so content can be updated continually
- Google Docs has wiki-like features
- Wiki technology is incorporated in course management systems such as Blackboard

Podcasts

- A podcast is a clip of audio or video content broadcast over the Internet using compressed files
 - Files that come to you through syndication
 - Podcasts are available in a wide variety of topics and content

The screenshot shows the Podcast Pickle website. At the top, there is a logo for a green pickle character wearing headphones, followed by the text "Podcast Pickle" and "The original podcast and vidcast community". To the right, there are input fields for "Email:" and "Password:" with a "Log me in" button. Below the header, there is a search bar and a navigation menu with links like "Home", "Join Podcast Pickle!", "Add a Podcast", "Forums", "Latest Reviews", and "Podcaster Store". There are also sections for "Find Podcasts" (Casts by Genre, Random Podcast, Top Podcasts, New Podcasts) and "Support" (Free Pickle Player, P.Dilly's Blog, Advertising Rates, Contact, Terms of Service). An "Info" section contains a warning about being ripped off. The main content area features a grid of categories with icons and links: "Arts", "Belief and Religion", "Business and Commercial", "Computers", and "Entertainment". Each category has a list of sub-topics. For example, "Arts" includes "Art Reviews - Books and Stories - Performance Arts - Photography - Poetry - Variety Arts". There are also several advertisements, including "Podcast Junk", "Iceland's", "FESTPITCH TV", "Podcast Inspector", and "\$25 Ads". At the bottom, there is a footer with "Anjuna Player" and "Podcast Pickle Anjuna".

Webcasts

- A Webcast is the broadcast of audio or video content over the Internet
 - Live or one-time events
 - Not updated automatically
 - Continuously feeds audio and video content
 - Facilitates viewing and downloading of large audio and video files.
 - Can be interactive, inviting audience response

Web Entertainment

- Web entertainment includes:
 - Internet radio
 - Music files
 - Streaming video
 - Interactive gaming
- Multimedia is anything that involves one or more forms of media in addition to text:
 - Graphics
 - Audio files
 - Video files

Conducting Business over the Internet

- *E-commerce* or *electronic commerce* is the process of conducting business online
 - Business-to-consumer (B2C)
 - Purchases consumers make at online stores
 - Business-to-business (B2B)
 - Businesses buying and selling to other businesses
 - Consumer-to-consumer (C2C)
 - Consumers selling to each other
 - eBay, Freecycle, Craigslist

I know how to tell if I am purchasing items securely online.

1. True
2. False



E-Commerce Safeguards

- Businesses must have some form of security certification to give customers a level of comfort
 - Secure logins
 - URL starts with https://
 - Padlock icon in toolbar
 - Green address bar

Online Shopping Guidelines

- Shop at well-known, reputable sites
- Avoid making online transactions when using public computers
- Pay by credit card, not debit card
- Check the return policy

Accessing the Web: Web Browsers

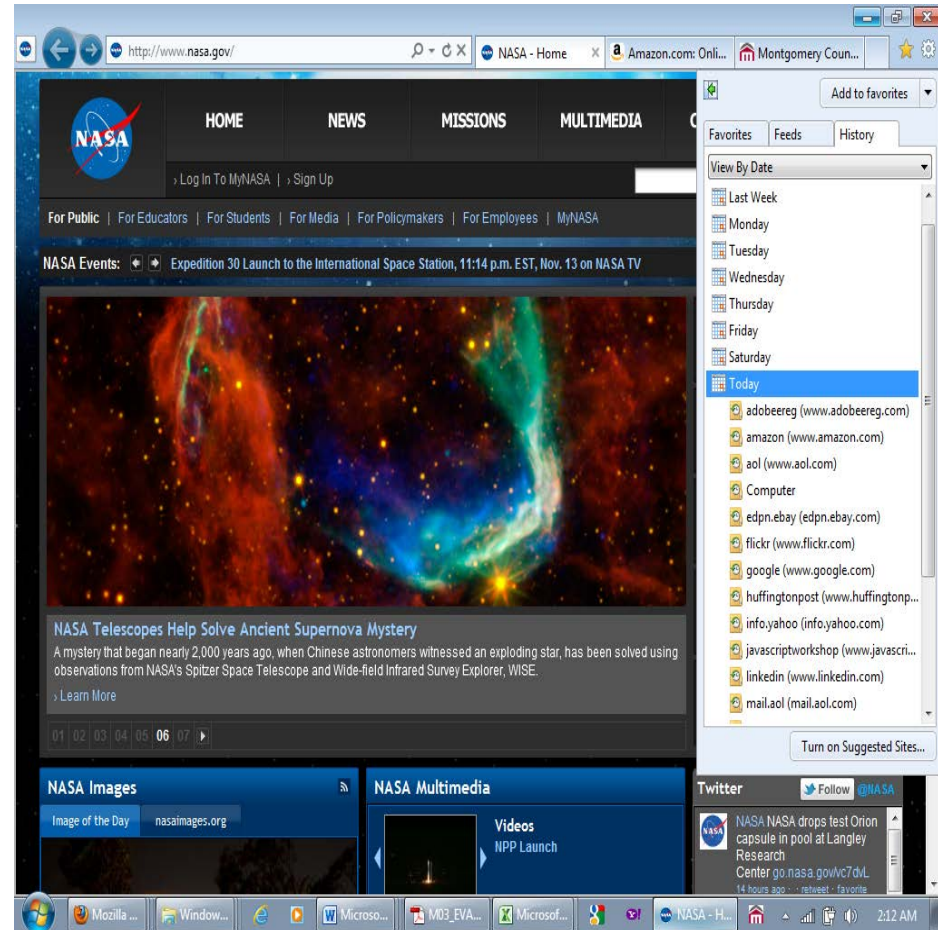
- Web browser is software installed on your computer that allows you to locate, view, and navigate the Web
- Graphical browsers display
 - Text
 - Pictures
 - Sound
 - Video

Popular Web Browsers

- Microsoft Internet Explorer (IE)
 - Included with Windows
- Mozilla Firefox
 - Open source browser gaining popularity
- Safari
 - Developed by Apple for Mac OS
- Google Chrome
 - Newest browser offers thumbnail access

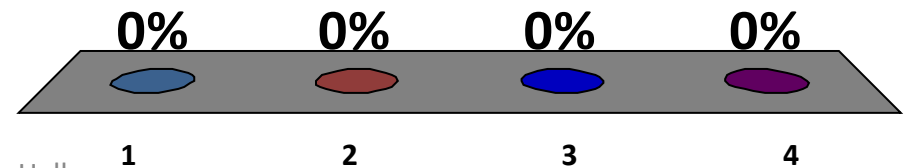
Common Browser Features

- Tabbed browsing
- Tear-off tabs
- Pinned tabs
- Thumbnail previews
- Built-in search box
- Default search engine



Which is *NOT* a type of web browser?

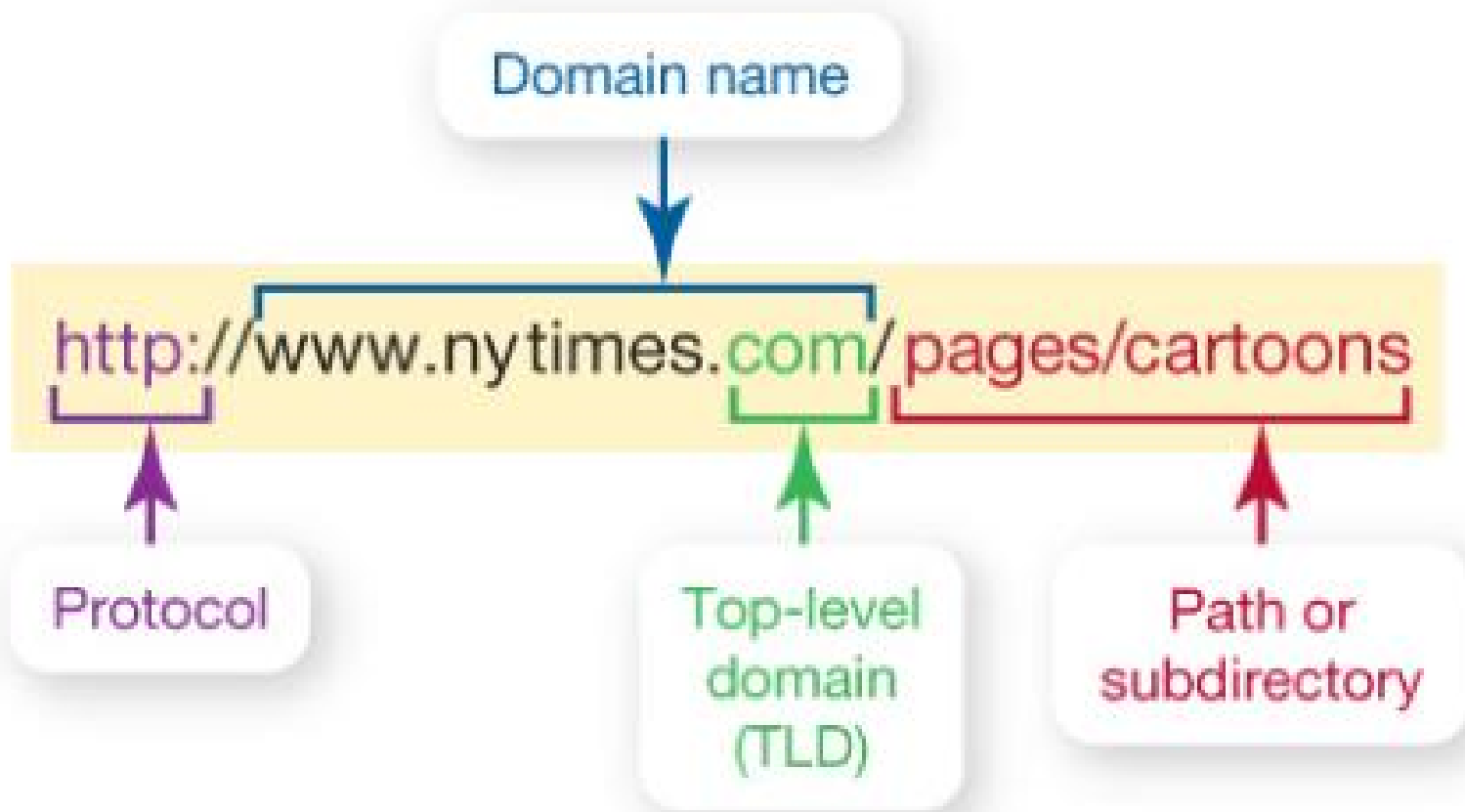
1. Safari
2. Chrome
3. Firefox
4. Skype



Getting Around the Web: URLs, Hyperlinks, and Other Tools

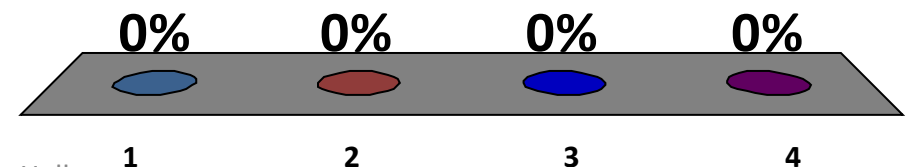
- Every Web site has a unique address
- Uniform Resource Locator (URL)
- Type URL in browser to connect to home page
- Move around site using hyperlinks

Parts of URL



Which is an example of a top-level domain?

1. http://
2. www.nytimes
3. .edu
4. Secure sockets layer

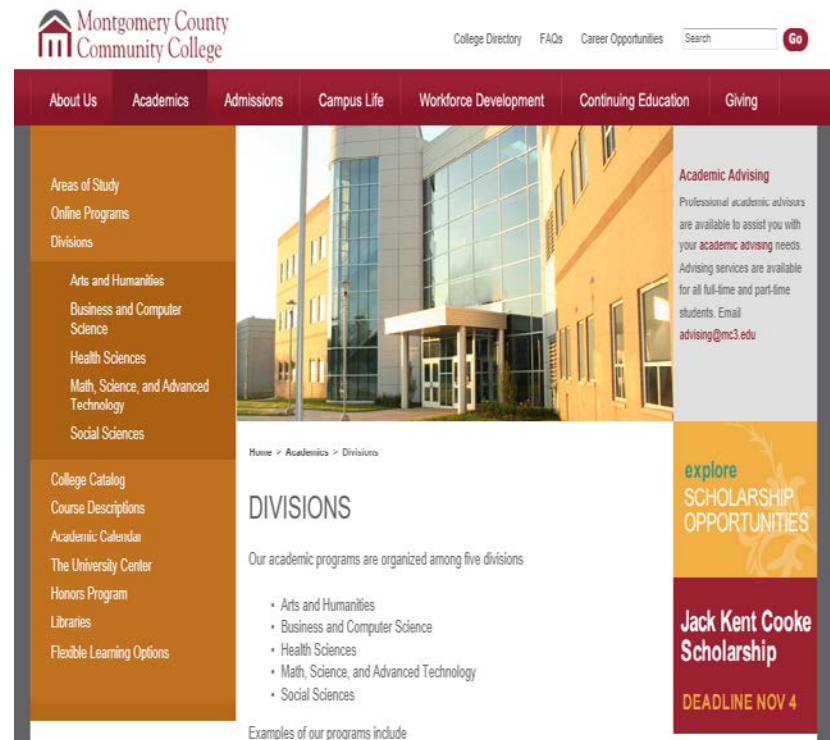


Top-Level Domains

Domain Name	Who Can Use the Domain Name
.biz	Businesses
.com	Originally for commercial sites but can be used by anyone now
.edu	Degree-granting institutions
.gov	Local, state, and United States government
.info	Information service providers
.mil	United States military
.name	Individuals
.net	Originally for networking organizations, no longer restricted
.org	Organizations (often nonprofits)

Hyperlinks and Beyond

- Hyperlink is specially coded element
- Clicking on hyperlink lets you jump to another location
 - Breadcrumb trail
 - Back and Forward buttons
 - Recently visited sites
 - History list



Favorites, Live Bookmarks, & Tagging

- Favorites feature places marker of site's URL on list on browser's toolbar
 - Favorites (Internet Explorer and Safari)
 - Bookmarks (Firefox and Google Chrome)
- Live bookmark feature (Firefox)
 - Provides up-to-date information
- Social bookmarking or tagging
 - Store, organize, and manage, bookmarks

I know how to clear the history on a computer.

1. True
2. False



Searching the Web Effectively

- Narrow down the vast quantity of Web information by using:
 - Search engine: a set of programs that searches the Web for keywords
 - Subject directory: a structured outline of Web sites organized by topics
 - Metasearch engine: searches other search engines rather than individual Web sites

Search Engines

- Search engines have three components:
 - Spider constantly collects data on the Web
 - Search engine organizes the data into large database
 - Search engine software searches indexed data pulling out relevant information
- Resulting list appears in your Web browser as list of hits

Search Strategies

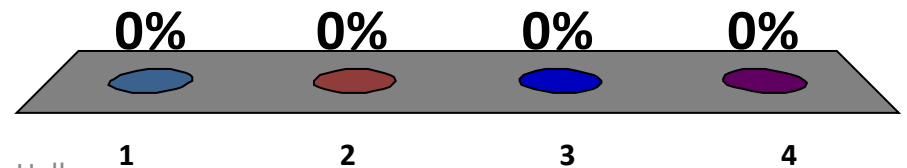
- Boolean operators (AND, NOT, OR)
- Advanced search page
- Search for a phrase using quotation marks
- Search within a specific Web site
- Use a wild card
- Click on Timeline feature

Evaluating Web Sites

- Before using an Internet resource, consider:
 - Authority
 - Bias
 - Relevance
 - Audience
 - Links
- These factors will help decide if Web site is good source of information

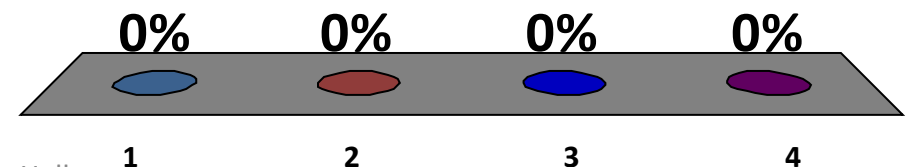
A _____ receives a request and returns the data or information.

1. Client
2. Server
3. Both 1 & 2
4. Neither 1 nor 2



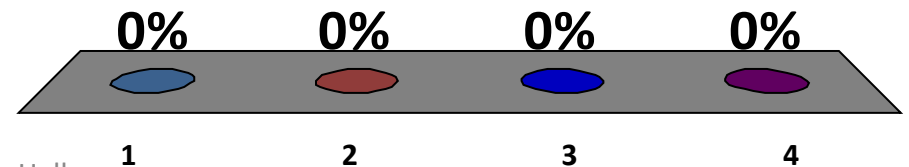
Which is an example of a domain name?

1. http://
2. www.mywebsite.com
3. .com
4. /pages/blog



Which of the following constantly collects data on the Web?

1. Spider
2. Ant
3. Search Engine
4. Browser



Chapter 3 Summary Questions

1. What is the origin of the Internet?

Chapter 3 Summary Questions

2. How does data travel on the Internet?

Chapter 3 Summary Questions

3. How can I communicate and collaborate using Web 2.0 technologies?

Chapter 3 Summary Questions

4. How can I communicate with e-mail?

Chapter 3 Summary Questions

5. What multimedia files are found on the Web, and what software is needed?

Chapter 3 Summary Questions

6. What is e-commerce, and what online safeguards are there?

Chapter 3 Summary Questions

7. What is a Web browser, and what is a URL and its parts?

Chapter 3 Summary Questions

8. How can I use hyperlinks and other tools to get around the Web?

Chapter 3 Summary Questions

9. How do I search the Internet effectively, and how can I evaluate Web sites?



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