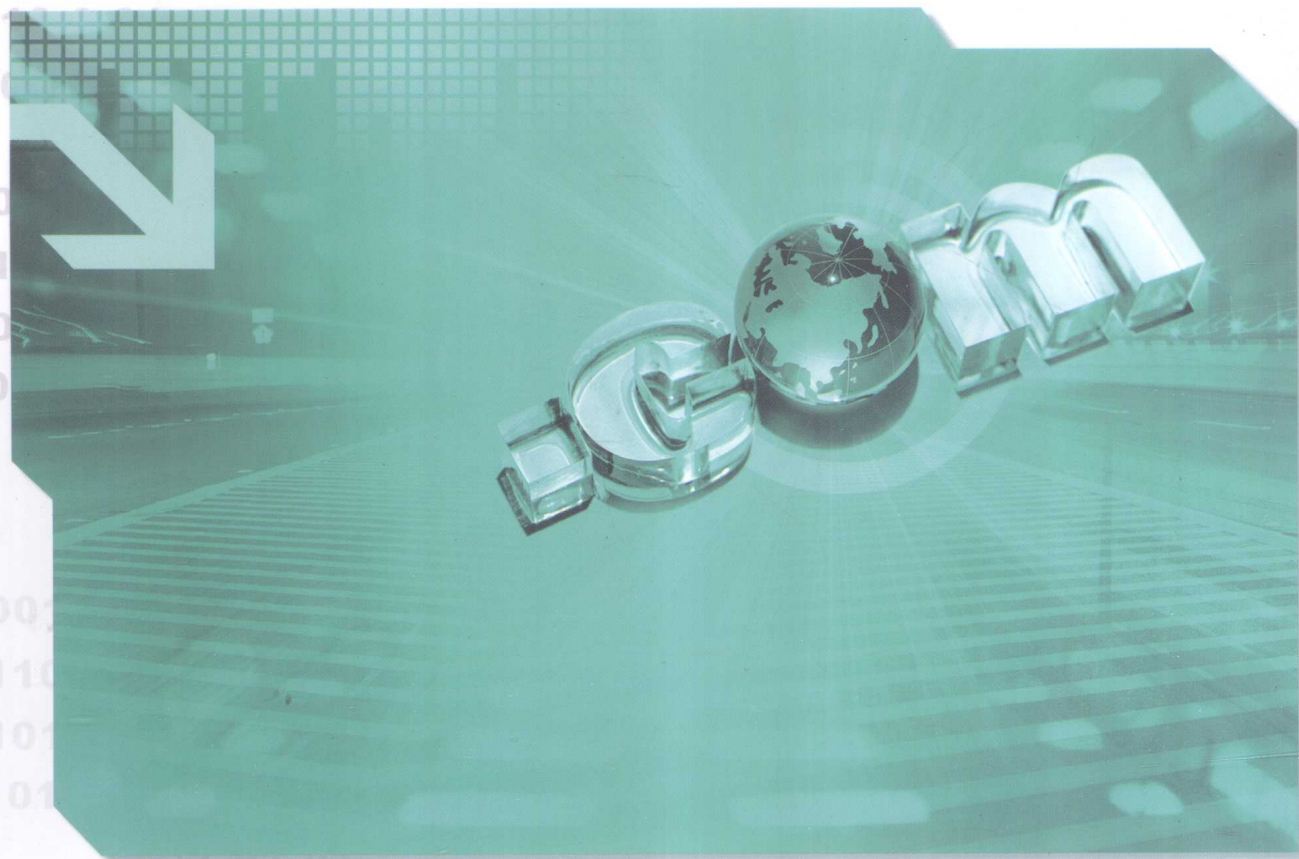


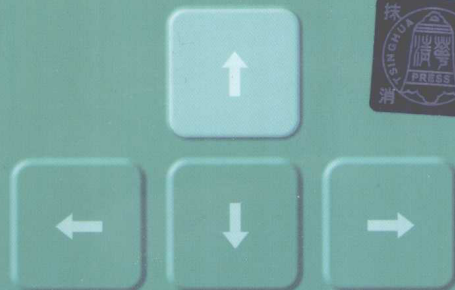
国家示范性高职高专规划教材 · 计算机系列



计算机英语

陈枫艳 陈志峰 主编

- 把握最新技术发展方向
- 突出学生实践能力培养
- 基于工作过程项目驱动



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计 算 机 英 语

陈枫艳 陈志峰 主 编

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清华大学出版社
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内 容 简 介

本书旨在使读者掌握计算机专业英语术语, 培养和提高读者阅读和笔译专业英语文献资料的能力, 并通过课堂英语交流和团队式讨论来提高学生英语口语运用能力。

本书中的英语短文语言地道、文字优美, 融知识性、趣味性、实用性为一体。全书共分 12 章, 涵盖了计算机基础词汇、常用短语、常见句型以及各种计算机文献。每个单元由对话、课文、词汇和短语、注释、练习组成。

本书可以作为高职高专院校计算机专业的英语教材, 也可供计算机专业人员及其他有兴趣的读者学习参考, 同时, 本书可作为高等院校计算机基础的双语教材。

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前言

本书共分 12 个单元,涵盖了计算机基础词汇、常用短语、常见句型及各种计算机文献。每个单元由对话、课文、词汇、短语、注释和练习组成。为了提高读者对计算机英语的运用能力和团队协作能力,每个单元最后还特别准备了若干个供读者练习口语的讨论题。本书旨在使读者掌握计算机专业英语术语,培养和提高读者阅读和笔译专业英语文献资料的能力,并通过课堂英语交流和团队式讨论题来提高学生英语口语运用能力。

本书与同类教材相比,有如下几个方面的特点。

- 编写教材的教师队伍由以下 3 方面的人员构成:计算机相关专业的教师、多年从事计算机专业英语教学的一线教师、多年从事普通英语教学的一线教师。

- 从教材的结构和内容编排来看,有其独到之处:既有专业词汇的正规解释,又包括了一些常见的语法现象的解释,同时还提供了实例图片,便于教学过程中举例或者对话使用,增强了灵活性,提高课堂教学效果,进行本课程教学的教师无论是计算机专业的还是英语专业的,都为他们提供了极大的方便。

- 从教材内容选取上来看,在硬件、软件、网络及应用等方面均有所体现。本书能与现有计算机基础等教材内容相互补充,一方面可以作为计算机基础双语教学的教材,另一方面也可以作为计算机基础教学的补充读物,富有趣味性。

本书可以作为高职高专院校计算机专业的英语教材,也可供计算机专业人员及其他有兴趣的读者学习参考,同时本书还可以作为高等院校计算机基础的双语教材。

本书由陈枫艳与陈志峰主编,杨淑娴与汤丽娜副主编。感谢相关资料的所有者并希望读者对本书提出宝贵的意见和建议。

编 者

2010 年 3 月

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Unit 1

Today's Computer



Dialogue

Text A Computer: An Important Role in People's Lives

Text B Networks and the Internet

Exercises



Part I

Dialogue

Pair Work: Practise the Following with Your Partner

A: Excuse me, do you have a minute? My name is Helen.

B: Yes. What can I do for you? I am Jack.

A: Are you from the English Department?

B: No, I'm a computer major.

A: Oh, really? You speak English quite well.

B: Thank you. What's your major? English?

A: Yes. But I'm not good at computer. Can you help me when you're not busy? I always have a lot of problems on computer.

B: Sure. Well, you see, it's very difficult to improve my oral English. So would you tell me anything about it?

A: Mm. Don't be afraid of making mistakes and practise more.

B: That's right. And I should try to speak

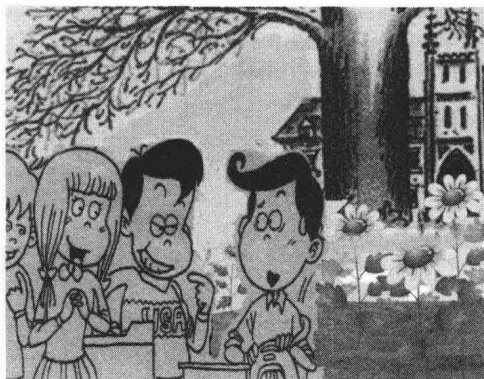
English as much as possible.

A: Exactly.

B: Thanks for your advice. I'm very glad to meet you today.

A: Me, too. See you.

B: See you.



Pair Work: Please Create Your Own Dialogues According to the Given Situations

1. Assuming that you meet with your classmates in a net bar.
2. Assuming that you get to know a new friend in the English corner.
3. Discuss the influence of computers in your life.

Part II

Text A

Computer: An Important Role in People's Lives

Today computer plays a more and more important role in people's lives. Surely we are living in the midst of a computer revolution, where many jobs heavily depend on the creation, collection, use, and dissemination of information. What's more, this revolution is showing no signs of slowing down but accelerating. Whether you become a teacher, lawyer, doctor, professional athlete, executive, or skilled tradesperson, your performance will largely depend on information and your use of it. Today's computers, with their almost dizzying speeds and high level of accuracy and reliability, are continually taking on new roles in our society.



In 1970s, it was not essential for the average people to know how to use a computer in his or her job and it was uncommon to have a computer at home. Computers were large and expensive, and few people had access to them. Furthermore, the use of computers generally required a lot of technical knowledge. Most computers used in organizations just carried out high-volume paperwork processing, such as issuing bills and keeping track of customers and product balances. Most ordinary working people were afraid of computers and there were few good reasons for getting familiar with them.

Suddenly things began to change. Microcomputers^①—inexpensive personal computers or PCs^②—were created and computer use increased dramatically. This increased use of computers has affected our personal lives, as well as changed the way many companies do business and the skills they seek in the people they hire.

Now, you can learn to use a computer without a complete understanding of the technical details of how a computer works. Yet, a little knowledge gives you a big advantage. Knowing something about cars can help you to make wise purchases and save money on repairs. Likewise, knowing something about computers can help you buy the right one for your needs, use it for maximum benefit, and give you a much higher level of comfort and confidence along the way. Therefore, computer literacy^③—knowing and understanding computers and their uses—is essential today for everyone.

Home PC

The proliferation of traditional and new types of computers in the home has increased home computing dramatically over the last few years. The home office has taken on greater importance since more and more people are doing some type of work at home. Use of the Internet at home to exchange e-mail, shop online, download music and software, and so forth has also led to special Internet appliances—easy to use devices designed for specific tasks, such as accessing the Internet or checking e-mail. These appliances commonly incorporate the roles of more than one traditional appliance, such as the telephone or television, in addition to their computing capabilities. This trend is called convergence.

It is also becoming more common to have a smart home in which household tasks (such as watering the lawn, turning on and off the air conditioning, and making coffee) can be controlled by a main home computer. Smart appliances—traditional appliances with some type of computer technology or connectivity built in—are expected to be even more prominent in the future.

Computer in Office

Though computers have been used in the workplace for years, their role is continually evolving. Originally just a research tool for computer experts and then a productivity tool for office

① microcomputer: 微型计算机

② PC: Personal Computer 个人计算机或个人电脑

③ computer literacy: 计算机读写能力



workers, the computer today is used by all types of employees in all types of businesses. From the CEO of a multinational corporation^①, to the check-out clerk at the grocery store, to the package delivery person, the computer is a universal tool for decision making, productivity, and communications (See Figure 1-1, Figure 1-2, Figure 1-3).



Figure 1-1



Figure 1-2

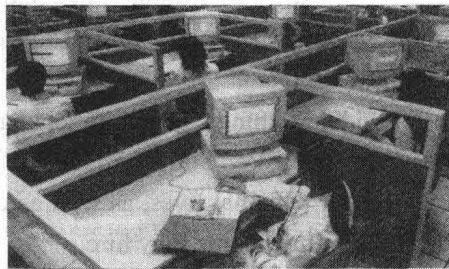


Figure 1-3

Computer in Day-to-day Life

In addition to being found in the home and the workplace, computers are encountered and used in day-to-day life, such as shopping, running errands, dining in a restaurant, and getting a car repaired. As they become more and more integrated in our society, computers are also becoming more invisible and easy to use (See Figure 1-4, Figure 1-5, Figure 1-6, Figure 1-7). Kiosks featuring



Figure 1-4

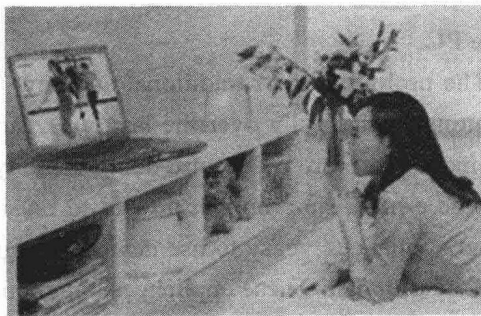


Figure 1-5

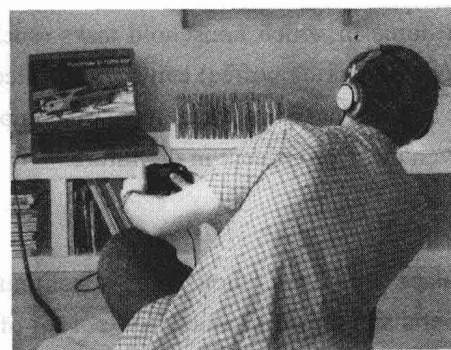


Figure 1-6

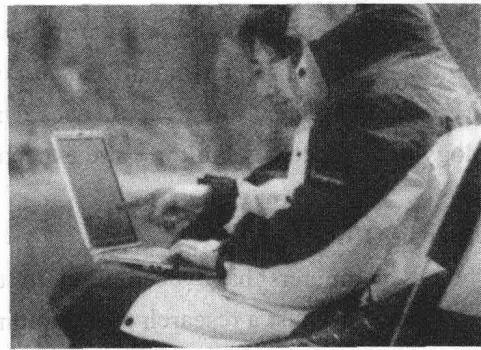


Figure 1-7

① multinational corporation: 跨国公司



screens that you touch with your finger are commonly found in hotels, conference centers, retail stores, and other public locations to allow you to easily look up information. Computers and devices for accessing the Internet are found in virtually all schools and public libraries, as well as in many airports, health clubs, hotel rooms, taxis, and restaurants. Many service professionals, such as waiters, auto technicians, and delivery people, use computers to keep track of customers.

It is also becoming increasingly common for individuals to carry Web-enabled cell phones, handheld computers, or similar portable devices to remain in touch with others and obtain stock quotes, driving directions, airline flight updates, and other needed information while on the go. Some computers are even small enough to be embedded in clothing or worn as a watch or other accessory.

This ability of computers to sort through massive amounts of data and quickly produce useful information for almost any kind of user, from teenager to payroll clerk to corporate president, makes them indispensable tools in our society. Without computers, businesses could never function at the level they do today. Banks would be overwhelmed by the job of tracking all the transactions they process. Familiar airline and telephone services would be impossible. Moon exploration and the space shuttle would still belong to science fiction, and scientific advances such as DNA^① analysis and gene mapping would be nonexistent.

Information Age and Revolution

The prominence of information technology over the last few decades has resulted in this time period being referred to as the information age. Now, according to many experts, we are entering a new information revolution. Many believe that the last major information revolution was the invention of the printing press in the mid-1450s; today's information revolution is usually thought of as being tied to the vast amount of information accumulated and distributed via the Internet. As discussed next and throughout this text, the availability of this huge collection of information has a great deal of advantages, but it has some disadvantages, as well.

Benefit for the Computer-oriented Society

The benefits of having such a computer-oriented society are numerous. The speed, accuracy, and reliability of computers have changed the way we do business not just at a management level as initially projected, but on day-to-day operations. The capability to design, build, and test new buildings and other structures before the actual construction begins has led to safer buildings and a more efficient development cycle. The ability to have beginning medical students perform virtual surgery using a computer instead of performing actual surgery on a patient is obviously a better option. The ability to shop, pay bills, do product research, and look up the vast amount of information available through the Internet from home or wherever you happen to be at the time is a huge convenience that few would have even dreamed about even a decade ago. And the ability of

① DNA: deoxyribonucleic acid 脱氧核糖核酸



businesses to be open for business 24 hours a day, 7 days a week, 365 days a year via the Internet and operate more efficiently, as well, is a distinct advantage.

The Impact of Computer, Internet & Network Economy

Along with the benefits of a computer-oriented society, computers have brought a variety of problems ranging from health concerns to personal security and privacy issues to ethics. Many businesses are feeling pressured to quickly become prepared to do business via the Internet or risk being left behind. Many jobs have also evolved with the emergence of the computer, such as including tasks previously performed by a secretary or an assistant, simply because the worker can now have a computer on his or her desk, briefcase, or pocket.

As far as privacy is concerned, individuals need to be aware of the vast amount of information that can be accumulated about them and distributed to others. Such information can be obtained from their online^① and offline^② buying history, as well as available public information, such as home purchases. The accumulation and distribution of information are important factors of our new-networked economy, but it is one area of great concern to many consumers.

Words and Expressions

dissemination [diˌsemiˈneiʃən] *n.* 分发

accelerate [ækˈseləreɪt] *v.* 加速, 促进

executive [igˈzekjʊtɪv] *adj.* 实行的, 执行的, 行政的 *n.* 执行者, 经理主管人员

tradesperson *n.* 商人, 店主, 零售商

dizzying *adj.* 令人昏乱的

accuracy [ˈækjʊrəsi] *n.* 精确性, 正确度

reliability [riˌlaɪəˈbɪlɪti] *n.* 可靠性

paperwork [ˈpeɪpəwɜ:k] *n.* 文书工作

issue [ˈɪʃuː] *n.* 出版, 发行, (报刊等) 期, 问题 *vt.* 使流出, 发行, 出版

keep track of 记录

dramatically [drəˈmætɪkəlɪ] *adv.* 戏剧地, 引人注目地

purchase [ˈpɜ:tʃəs] *vt.* 买, 购买 *n.* 买, 购买

maximum [ˈmæksɪməm] *n.* 最大量, 最大限度, 极大 *adj.* 最高的, 最多的, 最大极限的

confidence [ˈkɒnfɪdəns] *n.* 信心

and so forth 等等

appliance [əˈplaɪəns] *n.* 用具, 器具

convergence [kənˈvɜ:dʒəns] *n.* 集中, 收敛

lawn [lɔ:n] *n.* 草地, 草坪

① online: 联机, 在线

② offline: 脱机, 离线



- connectivity [kənek'tiviti] *n.* 连通性
- prominent ['prɒmɪnənt] *adj.* 卓越的, 显著的, 突出的
- evolve [i'vɒlv] *v.* (使) 发展, (使) 进展, (使) 进化
- check out *v.* 付账后离开, 检验, 合格, 及格
- grocery ['grəʊsəri] *n.* <美> 食品杂货店, 食品, 杂货
- encounter [in'kaʊntə] *v.* 遭遇, 遇到, 相遇 *n.* 遭遇, 遭遇战
- day-to-day *adj.* 日常的, 逐日的
- errand ['erənd] *n.* 差事, 差使, 使命
- kiosk ['ki:ɒsk] *n.* 亭子
- virtually ['vɜ:tʃʊəli] *adv.* 事实上, 实质上
- cell phone 手机
- portable ['pɔ:təbl] *adj.* 轻便的, 手提(式)的, 便携式的
- stock [stɒk] *n.* 库存, 股票, 股份 *vt.* 进货, 备有
- quote [kwəʊt] *vt. n.* 引用, 引证, 报(价)
- on the go 在进行活动, 忙碌, 刚要动身
- embed [im'bed] *vt.* 使插入, 使嵌入, 深留, 嵌入
- accessory [æk'sesəri] *n.* 附件, 零件, 附加物 *adj.* 附属的, 补充的, 同谋的, 副的
- sort [sɔ:t] *vt.* 分类, 整理, 拣选
- indispensable [ɪndɪ'spensəbl] *adj.* 不可缺少的, 绝对必要的
- overwhelm [əʊvə'welɪn] *vt.* 淹没, 覆没, 受打击, 制服, 压倒
- transaction [træn'zækʃən] *n.* 办理, 处理, 交易, 处理事务
- space shuttle 航天飞机
- science fiction 科幻, 科学幻想小说
- gene mapping 基因图谱
- nonexistent [ˌnɒnɪg'zɪstənt] *adj.* 不存在的
- printing press *n.* 印刷机
- accumulate [ə'kju:mjuleɪt] *v.* 积聚, 堆积
- distributed [dɪs'trɪbjʊtɪd] *adj.* 分布式的
- via ['vaɪə, 'vi:ə] *prep.* 经, 通过, 经由
- availability [ə'veɪlə'bɪlɪti] *n.* 可用性, 有效性, 实用性
- computer-oriented *adj.* 面向计算机的, 研究计算机的
- initially [ɪ'nɪʃəli] *adv.* 最初, 开头
- project ['prɒdʒekt] *n.* 计划, 方案, 事业, 企业, 工程
- efficient [ɪ'fɪʃənt] *adj.* (直接) 生效的, 有效率的, 能干的
- virtual ['vɜ:tʃʊəl, -tʃʊəl] *n.* 虚拟的
- option ['ɒpʃən] *n.* 选项, 选择权, 买卖的特权
- convenience [kən'vi:njəns] *n.* 便利, 方便, 有益, 方便的用具、机械、安排等
- range from... to 在……和……范围内变化
- ethic ['eθɪk] *n.* 道德规范, 伦理



emergence [i'mə:dʒəns] *n.* 浮现, 露出, (植物) 突出体, 出现

previously ['pri:vjə:slɪ] *adv.* 先前, 以前

briefcase ['brɪfkeɪs] *n.* 公文包

as far as sb. be concerned 至于; 就……而言

available [ə'veɪləbl] *adj.* 可用到的, 可利用的, 有用的

distribution [dɪstri'bju:ʃən] *n.* 分配, 分发, 配给物, 分布状态

Part III

Text B

Networks and the Internet

Networks and the Internet

A computer network ties computers together so that users can share hardware, software, and data, as well as electronically communicate with each other (See Figure 1-8). Many networks use a network server to manage the data flowing through the network devices.

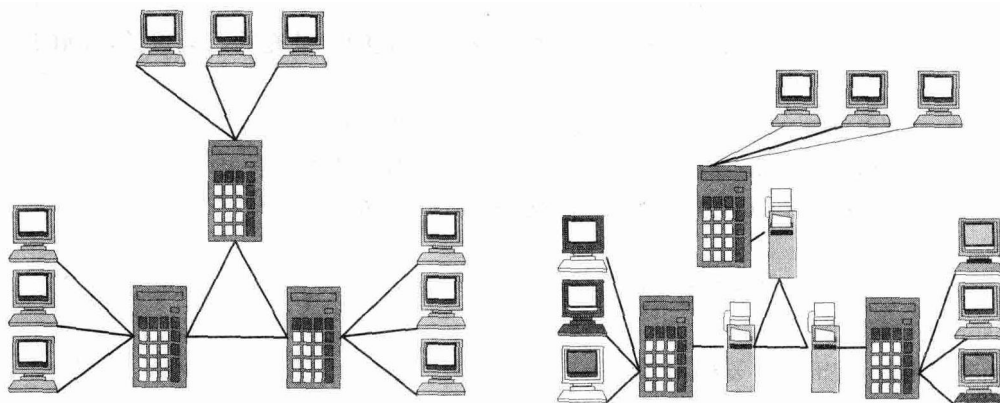


Figure 1-8 Network

Computer networks exist in many sizes and types. For instance, a home network might connect two computers inside the home to share a single printer and Internet connection. A small office network of five or six desktop computers might enable workers to share an expensive printer and a common bank of files on a very-high-capacity disk drive^①, both of which are also connected to the network. A large corporate network, which can connect all of the offices or retail stores of a corporation, is an example of a much larger network, as is the Internet, which ties together thousands of networks and millions of users throughout the world.

The Internet

The Internet is the largest and most well-known computer network in the world. It is

① disk drive: 磁盘驱动器

technically a network of networks, since an individual user connects to a network set up by their access provider or Internet service provider (ISP)^①, which in turn is connected to a larger network, which may be connected to an even larger network (See Figure 1-9). All together, this network of networks is referred to as the Internet. Since all the networks on the Internet are interconnected, any computer with Internet access can communicate with any other computer on the Internet, regardless of the ISP used.

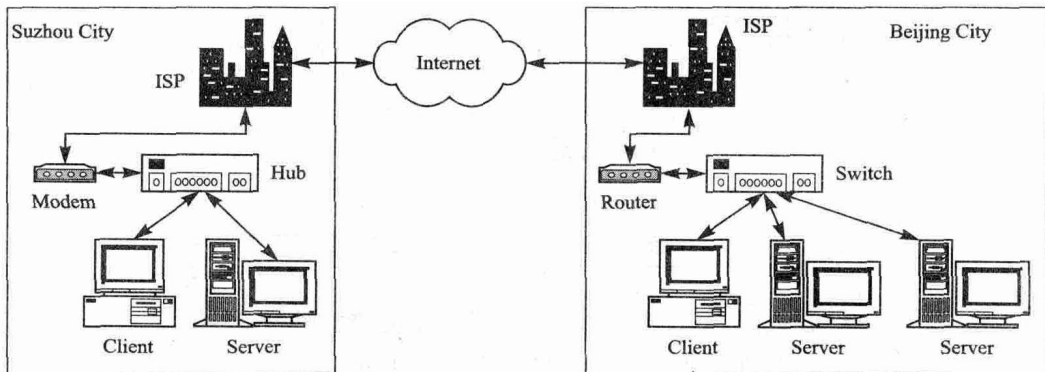


Figure 1-9 How Internet Works

Millions of computers of all sizes, millions of people from all walks of life, and thousands of organizations worldwide are connected to the Internet. The two most common Internet activities today are exchanging e-mail, electronic messages, and accessing the World Wide Web (WWW)^②.

The World Wide Web consists of a huge collection of Web pages that are available over the Internet. There are Web pages for virtually any topic. You can access product information, current news and weather, airline schedules, government publications, music downloads, and so forth, as well as shop, bank, buy and sell stock, and other types of online financial transactions.

Accessing Networks

To access a computer network, you need a modem (which sends and receives data over telephone or cable lines^③) or some other type of network adapter to physically connect your computer to the network. You will also need a software program that lets you connect to and use the facilities of the network. As already discussed, an Internet service provider (ISP) is needed to gain access to the Internet.

To log on to a network, an identification number or name (often called a user ID^④ or login ID) and a password are usually required (See Figure 1-10). Once your PC has been set up with the proper ID and password, connecting to the network is very simple. For a home or office network, you will usually be asked for your user ID and password each time you turn the computer on. After

① Internet service provider (ISP): 因特网服务提供商

② World Wide Web (WWW): 万维网

③ cable line: 电缆

④ ID: Identification 身份识别

providing the correct information, you will have access to the appropriate network resources and you can select whatever type of application you want to run, just as you would with a stand-alone (non-networked computer).

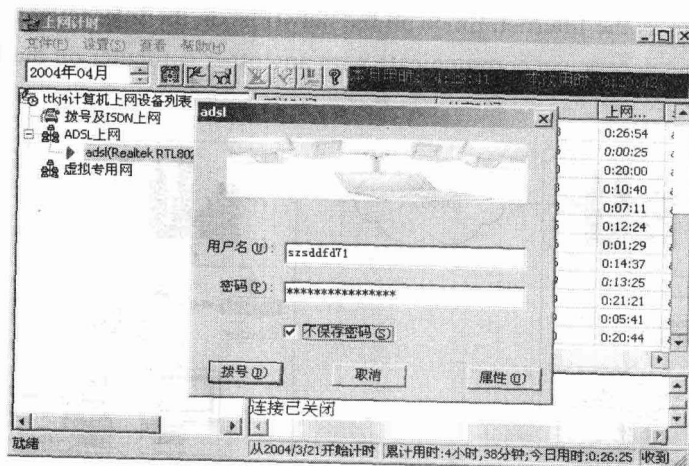


Figure 1-10 Login Form of Accessing the Internet

To access the Internet, you need to open the appropriate program or programs (usually a Web browser^① or special program supplied by your provider) (See Figure 1-11). With some types of Internet connections, your computer also needs to dial an appropriate telephone number in order to complete the Internet connection.

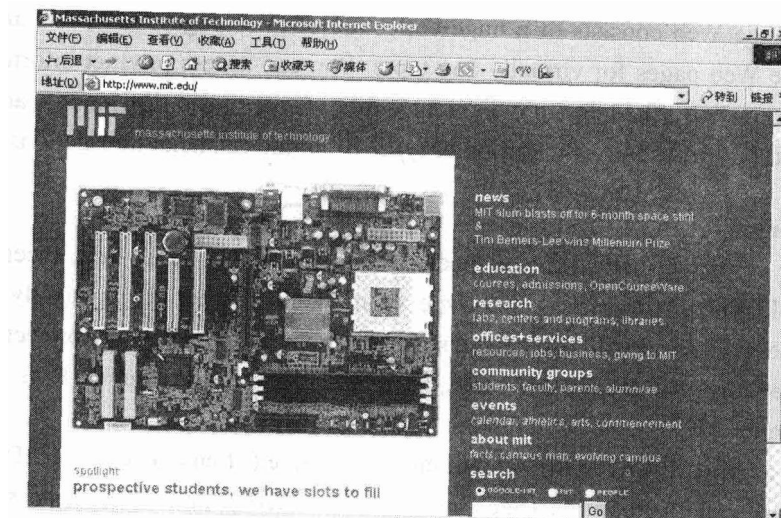


Figure 1-11 Web browser

Network Servers

It is common for networks to use a network server. Network servers are computers, often powerful PCs, or, in large networks, midrange or mainframe computers (discussed shortly), that

① browser: 浏览器, 一种专门用于查看超文本的程序