

# Software for Systems

## Part 1 Reading and Translating

### ➤ Section A Google Glass

Google Glass is an attempt to free data from desktop computers and portable devices like phones and tablets, and place it right in front of your eyes (Figure3-1) .

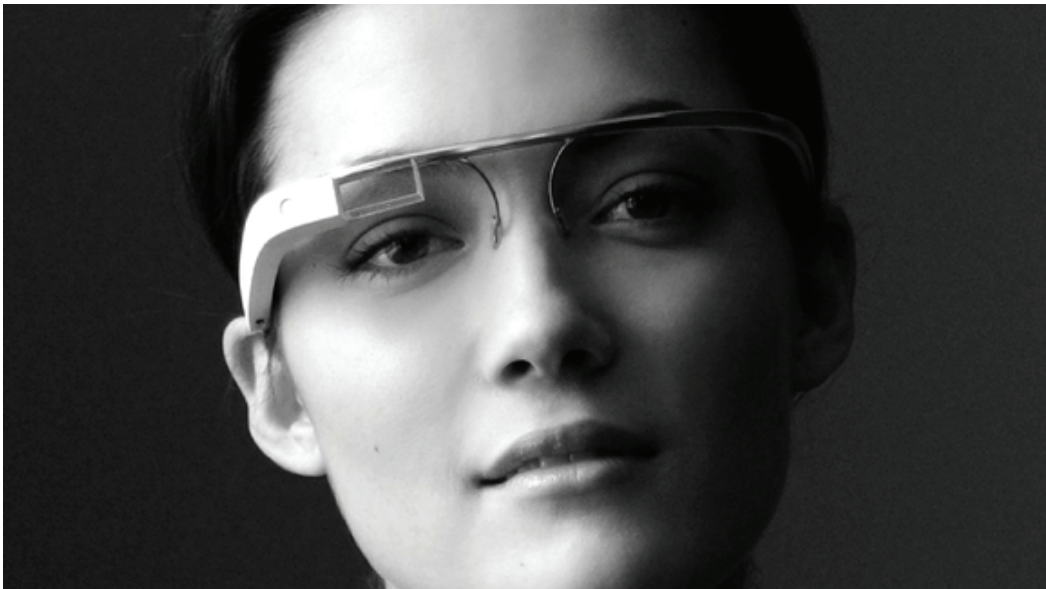


Figure 3-1 Google Glass

Essentially, Google Glass is a camera, display, touchpad, battery and microphone built into spectacle frames so that you can perch a display in your field of vision, film, take pictures, search and translate on the go. <sup>[1]</sup>

The principle is one that has been around for years in science fiction, and more recently it's become a slightly clunky reality. In fact, the "heads-up display" putting data in your field of vision became a reality as early as 1900 when the reflector sight was invented.

Google Glass uses display technology instead to put data in front (or at least, to the upper

right) of your vision **courtesy of** a prism screen. This is designed to be easily seen without **obstructing** your view. According to Google the display is “the equivalent of a 25-inch high definition screen from eight feet away”. There’s no official word on **native resolution**, but 640×360 has been widely **mooted**.

Overlaying data into your vision has obvious benefits; many of which are already functional in Google Glass. Directions become more intuitive (although it sounds like there is no GPS on board so you will have to pair it with your phone), you can view real-time translations or transcriptions of what is being said, and you can scroll through and reply to messages—all **on the fly**.

The embedded camera obviously does not need a **viewfinder** because it is simply recording your **first-person** perspective, allowing you to take **snaps** or **footage** of what you are actually seeing. Any function that requires you to look at a screen could be put in front of you.

Controlling this data is the next **neat** trick. With a microphone and touchpad on one arm of the frame, you can select what you want to do with a brief gesture or by talking to the device, and Google Glass will interpret your commands.

Google Glass can also provide sound, with **bone-induction** technology confirmed. This vibrates your skull to create sound, which is both more **grisly** sounding and much less cumbersome than traditional headphones.

**As well as** Google’s own list of features, the early apps for Google Glass provide a neat glimpse into the potential of the headset. As well as photos and film—which require no explanation—you can use the Google **hangout** software to video conference with your friends and show them what you’re looking at.

You’ll also be able to use Google Maps to get directions, although with GPS absent from the spec list, you’ll need to tether Glass to your phone. To do that, Google offers the MyGlass app. This pairs your headset with an Android phone. As well as sharing GPS data, this means messages can be received, viewed on the display, and answered using the microphone and Google’s voice-to-text functionality.

Google has given its Glass project a big boost by **snapping up** voice specialists DNNresearch. That functionality will also bring the ability to translate the words being spoken to you into your own language on the display. Obviously you’ll need a Wi-Fi connection or a **hefty** data plan if you’re in another country, but it’s certainly a neat trick if it works.

Third parties are also already developing some rather cool/scary apps for Google Glass—including one that allows you to identify your friends in a crowd, and another that allows you to dictate an E-mail.

The New York Times app gives an idea how news will be displayed when it’s asked for: a headline, **byline**, appropriate image and number of hours since the article was published are displayed. Other cool ideas include an air carrier’s suggestion that you could have flight details **beamed** to you while you are waiting at the airport. Basically, the sky’s the limit.

**Words****spectacle**[ˈspektəkl̩] *n.* 眼镜**frame**[freɪm] *n.* 眼镜框**perch**[pɜːtʃ] *v.* 停留**clunky**[ˈklʌŋki] *adj.* 粗笨的, 笨重的**reflector**[riˈflektə] *n.* 反光镜, 反射镜**prism**[ˈprɪzəm] *n.* 棱镜**obstruct**[əbˈstrʌkt] *v.* 妨碍, 阻碍, 阻止**moot**[muːt] *v.* 提出...供讨论, 提出(问题)**intuitive**[ɪnˈtʃuɪtɪv] *adj.* 直觉的, 凭直觉获知的, 直观的**transcription**[trænˈskrɪpʃən] *n.* 录音, 翻译, 抄写**viewfinder**[ˈvjʊfaɪndə] *n.* (照相机)取景器, 反光镜**snap**[snæp] *n.* 照片**footage**[ˈfʊtɪdʒ] *n.* 连续镜头, 电影片段**neat**[ni:t] *adj.* 巧妙的, 简洁的, 简便易行的**grisly**[ˈgrɪzli] *adj.* 可怕的, 厉害的, 严重的**cumbersome**[ˈkʌmbəsəm] *adj.* 复杂而低效的, 笨重的**hangout**[ˈhæŋaʊt] *n.* 住所, 常去的地方**hefty**[ˈhefti] *adj.* 相当多的, 异常大的**scary**[ˈskeəri] *adj.* 引起恐慌的, 骇人的**byline**[ˈbaɪlaɪn] *n.* 署名**beam**[bi:m] *v.* 发送, 发射**Phrases**

be courtesy of

由...提供

native resolution

原始分辨率

on the fly

联机, 在线

first-person

第一人称

bone-induction

[医]骨诱导

as well as

除...之外(也), 同...一样(也), 和, 还

snap up

抢购, 抢先弄到手

**Notes**[1] **Original:** Essentially, Google Glass is a camera, display, touchpad, battery and microphone

built into spectacle frames so that you can perch a display in your field of vision, film, take pictures, search and translate on the go.

**Translation:** 本质上来说，谷歌眼镜是嵌入进眼镜框的摄像机、显示器、触摸板、电池以及扩音器，所以用户可以暂停视角、记录视频、拍照片、搜索及解说眼前的事物。

### *Exercises*

#### **I. Read the following statements carefully, and decide whether they are true (T) or false (F) according to the text.**

- \_\_\_ 1. Google Glass is an attempt to free data from desktop computers and portable devices like phones and tablets, and place it right beside your ears.
- \_\_\_ 2. Wearing Google Glass can obstruct your view.
- \_\_\_ 3. Google Glass allows you to take snaps or footage of what you are actually seeing.
- \_\_\_ 4. One of the apps that are developing for Google Glass allows you to dictate an E-mail.
- \_\_\_ 5. Google Glass's display is "the equivalent of a 25-inch high definition screen from eighty feet away".

#### **II. Choose the best answer to each of the following questions according to the text.**

1. How many feet away does the Google Glass's display equal a 25-inch high definition screen from?  
(A) 2  
(B) 4  
(C) 6  
(D) 8
2. Which of software can be used to get directions for Google Glass?  
(A) IBM DB2  
(B) Google Maps  
(C) Adobe Photoshop  
(D) Microsoft Word
3. Essentially, which of the following is Google Glass built into spectacle frames except?  
(A) Cup  
(B) Microphone  
(C) Display  
(D) Camera

#### **III. Translate the following sentences according to the text.**

Directions become more intuitive (although it sounds like there is no GPS on board so you will have to pair it with your phone), you can view real-time translations or transcriptions of what is being said, and you can scroll through and reply to messages—all on the fly.

**IV. Fill in the blanks with the words or phrases chosen from the box. Change the forms where necessary.**

market	offshoot	programme	source
reason	license	feature	performe
free	introduce		

DAN BRICKLIN—VisiCalc Developer

Dan Bricklin 1 wikiCalc in 2007 as a 2 software tool for Web pages that have data in lists and tables. This program is an 3 of a prototype program he had developed 30 years earlier, named VisiCalc, that 4 a series of calculations automatically when numbers were entered.

Bricklin and a friend founded a company, Software Acts, to develop VisiCalc, short for Visible Calculator. They 5 the software using Apple Basic on an Apple II computer. This small program was the first type of application software that provided a 6 for businesses to buy Apple computers. It included many 7 found in today's spreadsheet software.

Bricklin founded a small consulting company, Software Garden, to develop and 8 software such as wikiCalc. The company also distributes resources to help programmers learn about 9 their products and about open 10 software.

**V. Translate the following passage into Chinese.**

ADOBE SYSTEMS—Design Software Leader

Practically all creative professionals involved with art and photography have a copy of Adobe Photoshop on their computer, and the leading computer manufacturers ship their products with a copy of Adobe Reader installed. The worldwide presence of Adobe Systems software attests to the company's success in developing programs that help people communicate effectively.

Charles Geschke and John Warnock founded the company in 1982 and named it after a creek that ran behind Warnock's house in California. Creative Suite CS6 contains the fundamental tools that help photographers, designers, and publishers develop and maintain their documents and Web sites, and it includes Dreamweaver, Flash, Fireworks, Premiere, InDesign, Illustrator, Photoshop, etc.

Recently, Adobe was voted one of the 100 Best Companies to Work For.

➤ **Section B 3D Printing**

You've heard of 3D printing from newscasters and journalists, astonished at what they've witnessed. A machine **reminiscent** of the **Star Trek Replicator**, something magical that can create objects **out of thin air**. It can "print" in plastic, metal, nylon, and over a hundred other materials(Figure 3-2). It can be used for making nonsensical little models like the over-printed **Yoda**, yet it can also print manufacturing prototypes, end user products, **quasi-legal** guns, aircraft engine parts and even human organs using a person's own cells.

We live in an age that is witness to what many are calling the Third Industrial Revolution.

3D printing, more professionally called additive manufacturing, moves us away from the Henry Ford era mass production line, and will bring us to a new reality of customizable, one-off production.

Need a part for your washing machine? As it is now, you'd order from your repairman who gets it from a distributor, who got it shipped from China, where they mass-produced thousands of them at once, probably **injection-molded** from a very expensive mold. <sup>[1]</sup> In the future, the beginning of which is already here now, you will simply 3D print the part right in your home, from a CAD file you downloaded. If you don't have the right printer, just print it at your local **fab**.

3D printers use a variety of very different types of additive manufacturing technologies, but they all share one core thing in common: they create a three dimensional object by building it layer by successive layer, until the entire object is complete. It's much like printing in two dimensions on a sheet of paper, but with an added third dimension: UP, the Z-axis.

Each of these printed layers is a thinly-sliced, horizontal cross-section of the eventual object. Imagine a multi-layer cake, with the baker laying down each layer one at a time until the entire cake is formed. 3D printing is somewhat similar, but just a bit more precise than 3D baking.

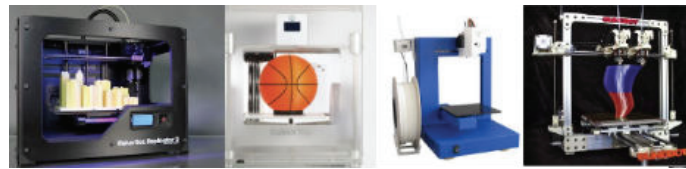


Figure 3-2 3D Printing

While most people have yet to even hear the term 3D printing, the process has been in use for decades. Manufacturers have long used the printers in the design process to create prototypes for traditional manufacturing. But until the last few years, the equipment has been expensive and slow.

Now, fast 3D printers can be had for tens of thousands of dollars, and end up saving the companies many times that amount in the prototyping process. For example, Nike uses 3D printers to create multi-colored prototypes of shoes. They used to spend thousands of dollars on a prototype and wait weeks for it. Now, the cost is only in the hundreds of dollars, and changes can be made instantly on the computer and the prototype reprinted on the same day.

Some companies are using 3D printers for **short run** or custom manufacturing, where the printed objects are not prototypes, but the actual end user product. As the speeds of 3D printing go up and the prices come down, look for more and more of this. And expect more availability of personally customized products.

Even if you don't design your own 3D model, you can still print some very cool pieces. There are model **repositories** such as Thingiverse, 3D Parts Database, and 3D Warehouse that have model files you can download for free.

What do all these people print? It's limitless. Some print things like jewelry, some print replacement parts for appliances such as their dishwasher, some invent all sorts of original things, some create art, and some make toys for their kids. With the many types of metal, plastic, glass, and other materials available (even gold and silver), **just about** anything can be printed.

This is a **disruptive** technology of **mammoth proportions**, with effects on energy use, waste, customization, product availability, art, medicine, construction, the sciences, and of course manufacturing. It will change the world as we know it.

### Words

#### newscaster

[ˈnju:z,kɑ:stə] *n.* (电台或电视的) 新闻播音员

#### nonsensical

[nənˈsensɪkl] *adj.* 无意义的, 荒谬的, 愚蠢的

#### additive

[ˈædətɪv] *adj.* 附加的

#### customizable

[ˈkʌstəmaɪzəbəl] *adj.* 可定制的

#### fab

[fæb] *n.* 代工厂

#### repository

[rɪˈpɒzəˈtɔ:ri] *n.* 仓库, 知识库, 储藏室

#### disruptive

[dɪsˈrʌptɪv] *adj.* 颠覆性的, 破坏的

#### mammoth

[ˈmæməθ] *adj.* 庞大的, 巨大的

#### proportion

[prəˈpɔ:ʃən] *n.* 部分, 比例

### Phrases

reminiscent of	表明…的, 暗示…的
Star Trek Replicator	星际迷航的复制
out of thin air	无中生有, 突然出现
Yoda	尤达(《星球大战》里重要的人物)
quasi-legal	准法律的, 准合法的
one-off	一次性的
injection-mold	注塑模具
end up	(以…) 结束, 最终成为[变得], 最后处于
short run	短期(指企业无法改变生产规模的较短期限)
just about	几乎, 大约

### Notes

[1] **Original:** As it is now, you'd order from your repairman who gets it from a distributor, who got it shipped from China, where they mass-produced thousands of them at once,

probably injection-molded from a very expensive mold.

**Translation:** 在这个时代，他所订购的零件或许来自于一个用非常昂贵的模具注塑而成的一次性批量生产的零件，从中国运至分销商，分销商再交给修理工，最后到达他的手中。

### *Exercises*

#### **I. Read the following statements carefully, and decide whether they are true (T) or false (F) according to the text.**

- \_\_\_ 1. 3D printers are the same as the 2D printers.
- \_\_\_ 2. 3D printers create a three dimensional object by building it layer by successive layer, until the entire object is complete.
- \_\_\_ 3. 3D printing is much like printing in two dimensions on a sheet of paper, but with an added Z-axis.
- \_\_\_ 4. In the 3D world, a 3D printer also needs to have instructions for what to print.
- \_\_\_ 5. The 3D modeling program that creates a Computer Aided Design (CAD) file can be sent to the 3D printer.

#### **II. Choose the best answer to each of the following questions according to the text.**

1. Which of the following is wrong about 3D printers?
  - (A) It's much like printing in two dimensions on a sheet of paper, no others.
  - (B) Even if you don't design your own 3D model, you can still print some very cool pieces.
  - (C) If you don't have the a 3D printer, you can print something at your local fab.
  - (D) As the speeds of 3D printing go up and the prices come down, more and more people can afford to use 3D printers.
2. Which of the following can be printed by 2D printers?
  - (A) Football
  - (B) Pen
  - (C) Table
  - (D) Photo
3. Which word is appropriate for describing the technology of 3D printing?
  - (A) Old
  - (B) Disruptive
  - (C) Futureless
  - (D) Obsoleted

#### **III. Translate the following sentences according to the text.**

This is a disruptive technology of mammoth proportions, with effects on energy use, waste, customization, product availability, art, medicine, construction, the sciences, and of course manufacturing.

**IV. Fill in the blanks with the words or phrases chosen from the box. Change the forms where necessary.**

headquarter	fund	free	mission
volunteer	solicit	domain	disseminat
incorporate	encyclopedia		

WIKIMEDIA FOUNDATION—International Movement for Free Knowledge

One of the 10 most visited Web sites in the world is Wikipedia. This online 1 began in 2001, and two years later the Wikimedia Foundation 2 to provide the infrastructure and support for 3 information 4 of charge.

The Foundation is a nonprofit charitable corporation organized in Florida and 5 in California. The more than 20 staff members coordinate the efforts of thousands of 6 who provide content and serve on committees to raise 7, develop long-term plans, and oversee various projects. A network of local chapters in more than 20 countries supports the Foundation by 8 donations, organizing events, and raising awareness of Foundation activities and the need for free Internet content.

More than 300 servers run the Wikimedia projects, and the Foundation owns this equipment along with the 9 names and trademarks. The 10 is to bring educational content in as many forms as possible to all areas of the world.

**V. Translate the following passage into Chinese.**

BILL GATES—Microsoft Founder

When Bill Gates stepped down from his day-to-day activities at Microsoft in 2008, his action marked the end of an era that shaped the computer world. He remains the company's chairman and advisor, but he now devotes much of his time directing the Bill & Melinda Gates Foundation, a philanthropic organization working to help people worldwide lead healthy, productive lives. His foundation currently is awarding \$3 billion in grants to improve education and graduation rates via technology, with an emphasis on online learning.

Gates learned to program computers when he was 13 years old. Early in his career, he developed the BASIC programming language for the MITS Altair, one of the first microcomputers. He founded Microsoft in 1975 with Paul Allen, and five years later they licensed the first operating system, called PC-DOS, to IBM for \$80,000. This decision to license, rather than sell, the software is considered one of the wisest business decisions Gates ever made. Today, Microsoft's Windows and Office products dominate the software market.

## **Part 2** Simulated Writing: Report

### **1. Introduction**

A report is a structured written presentation directed to interested readers in response to

some specific purpose, aim or request. There are many varieties of reports, but generally their function is to give an account of something, to answer a question, or to offer a solution to a problem. An effective report is appropriate to its purpose and audience, accurate, logical, clear and concise, and well organized with clear section headings.

## 2. Report Structure

One important advantage that a report has over other written communication is that it follows a standardized format. This enables readers to find and focus on specific pieces of information. Most reports are modeled on the following structure (modified where necessary).

- Transmittal document
- Title page
- Table of contents
- Abstract/Executive Summary
- Introduction
- Discussion
- Conclusions
- Recommendations
- Bibliography

## 3. Procedure for Report Writing

The following is a suggestion as to how you might proceed in compiling and presenting a report. There are three stages.

Stage One: Planning

Stage Two: Writing

Stage Three: Formatting, revising and proof-reading

### **Stage One: Planning**

#### **(1) Defining the purpose**

Read the brief carefully, identify key words and make sure you know what's really being asked.

#### **(2) Defining the audience**

Determine your audience's level of understanding and what your audience needs to know.

#### **(3) Establishing parameters**

Determine the scope and level of detail required, the length of the report and what can be covered in that length.

#### **(4) Gathering information**

Make sure the information you gather is relevant, contemporary and factually correct and make sure that you transcribe facts and figures correctly.

### **Stage Two: Writing**

#### **(1) Writing the body**

There are four components of the body of the report: the introduction, the discussion, the

conclusions and the recommendations.

#### (1.1) Introduction

The introduction leads into the main subject matter by giving the necessary background of the report, its aims, premises, scope, limitations, approach intended audience, possible benefits and any instructions that may be useful for the reader. If professional terms are used in the report, define them clearly.

It puts the discussion in perspective, explains why the report is necessary and gives background information on the subject matter.

#### (1.2) Discussion

The discussion is the main body of the report. Use headings and sub-headings. It describes, analyses, interprets and evaluates the procedures, data, findings, relationships, visual material, methodology and results in the report. This material should be presented in an order that leads logically towards the conclusions and recommendations.

In writing the discussion section of the body, you should:

- Pitch at appropriate level
- Organize material logically
- Use clear, concise language
- Give concrete examples

#### (1.3) Conclusions

Conclusions are drawn from evidence, analysis, interpretation and evaluation presented in the discussion. No new material should be introduced; the conclusions should follow logically from the Discussion. The Conclusions section should give:

- Conclusions
- Key points
- Main findings

#### (1.4) Recommendations

The Recommendations section (when used—not all reports give recommendations) should present your informed opinions, suggestions, possible actions to be taken, applications and recommendations arising from a rational consideration of the discussion and conclusions.

- Be definite
- Be perceptive
- Be imaginative
- Be rational

### **(2) Abstract/Executive Summary**

Once the body of the report is written, write the abstract. The abstract (also known as the executive summary) is a concise summary presentation of the essential elements of the report, from the introduction to the recommendations. It should be independent (can be read on its own), comprehensive (covers all the main points), clear and concise. As a general rule it should be short, only 10%-15% of the length of the report, and should be written in full sentences and

paragraphs. It should include a summary of the following:

- Purpose
- Scope
- Achievements
- Main points
- Conclusions
- Recommendations

### **(3) Writing the supplementary material**

#### **(3.1) Transmittal document**

The transmittal document is not part of the report, but accompanies the report. In letter, memo, or minute form, it personalizes the report for a specific reader and calls attention to those items or sections in the report which are of particular interest to that person.

#### **(3.2) Title page**

Identifies the report with the following information:

- Title
- Author's name, position and qualifications
- Authority for report
- Place of origin
- Date

#### **(3.3) Table of contents**

The table of contents shows the section titles and major headings in order of appearance, along with their related page locations. Standard page numbering begins with the Introduction. The Abstract or Executive Summary is usually numbered with lower case Roman numerals (i, ii, iii, iv, etc.)

#### **(3.4) Bibliography**

The bibliography lists all publications either cited or referred to in preparing the report. Use the Referencing System recommended by your school.

### **Stage Three: Formatting, revising and proof-reading**

Apply the following "report checklist"

- Have I fulfilled the purpose of the report?
- Is it written at a level appropriate to its audience?
- Are its facts correct?
- Is it comprehensive?
- Is all the included information relevant?
- Are the layout and presentation well thought out?
- Is the style clear, concise and professional?
- Is the abstract compact?
- Does the introduction adequately introduce the discussion?
- Is the discussion organized logically?

- Does the conclusions section evaluate the discussion properly?
- Are the recommendations reasonable?
- Does the table of contents correspond with the actual contents? Are page numbers correct?
- Have I acknowledged all sources of information through correct referencing?
- Have I checked spelling, grammar and punctuation?
- Have I carefully proof-read the final draft?

## 4. Sample

### Report on the Possibilities of the New Project

#### Terms of reference

The Board of Directors has requested a report on what our staff think of our plan of launching a new project in the second half year. They want to know the possibility of the plan. The report should be discussed for the next Board of Directors' meeting.

#### Proceedings

I read and analyzed the written comments made by nearly 200 staff members.

#### Findings

(1) The case for the new project

(1.1) Almost 50 percent of staff think the new project is badly needed to challenge the competitors of the company and help the company out of the crisis.

(1.2) Nearly a quarter of staff have lost their heart about the old pattern of production and welcome a better improved project.

(2) The case against the new project

(2.1) About 8 percent of staff suspect the future of the new project.

(2.2) About 8 percent were worried about the plan since it cost too much.

#### Conclusions

Most of our staff understand the importance of the new project.

The budget of the project causes a lot of worries.

#### Recommendations

The company should introduce the new project to the staff, emphasize its importance and do the best to cut down the expense of the project.

Lily Tan

Marketing Manager

*[The abstract/executive summary and the supplementary material are omitted from this report.]*

## 5. Exercises

**There are two scenarios below, please choose one and write a report.**

**Scenario 1:** A market research report about a specific field in software industry (software

outsourcing, software testing, etc.)

**Scenario 2:** A progress report about one of your software projects

## Part 3 Listening and Speaking

### ➤ Dialogue: Making an Electronic Album Using Multimedia Editing

#### Software

*(Today is the first day after the National Day holiday. Henry met Mark in the hall.)*

**Henry:** Hi, Mark. How was your National Day holiday?

**Mark:** It's wonderful! During this holiday, I went to Hangzhou with my family. It's a very beautiful city. We took a lot of photos and made many pieces of video with my video camera.<sup>[1]</sup>

**Henry:** Really? Sounds exciting! All of these will be a precious memory. I think you can make a family album about your journey in Hangzhou with that material, so that you can enjoy it on your computer at any time. Furthermore, if you like, you can release it on your blog so as to allow more people to share with you.<sup>[2]</sup>

**Mark:** Oh, it's a good idea! But I don't know how to do that at all. Would you like to help me?

**Henry:** Sorry, I'm a layman too. But Sophie is good at multimedia editing software<sup>[3]</sup>, maybe she can help you.

**Sophie:** According to my experience, graphics software is necessary, Mark. It can help you create, manipulate, and print graphics.

**Henry:** It has many types, right?

**Sophie:** Yes, it includes painting software, photo editing software, drawing software, 3-D graphics software, CAD software, and presentation software, etc.<sup>[4]</sup> However, in your case, Mark, photo editing software is enough, such as Photoshop<sup>[5]</sup>.

**Mark:** Oh, yes. I've heard that it's a very nice photo editing software. And what about those pieces of video?

**Sophie:** Don't worry. You can edit those pieces of video with video editing software. It provides a set of tools for transferring video footage from a camcorder to a computer, clipping out unwanted footage, assembling video segment in any sequence, adding special visual effects and adding a sound track.

**Henry:** I have heard that one brand of this software is Adobe Premiere<sup>[6]</sup>.

**Sophie:** That's right! Besides, **DVD** authoring software offers tools for creating DVDs with Hollywood-style menus. For example, Sonic DVDit, ULead DVD MovieFactory, Apple iDVD, and Adobe Encore DVD.

**Mark:** Thank you very much for your helpful guide, Sophie. Would you like to tell me some

details about how to use them to make a complete electronic album<sup>[7]</sup>?

**Sophie:** No problem! If you have time, I'll show you how to use these kinds of software.

**Henry:** Well, we'll expect your wonderful works, Mark!

**Mark:** Ok, I'll try my best!

**Sophie:** May you succeed!

### Exercises

Work in pairs, and make up a similar conversation by replacing the scenarios with other material in the below.

### Making an Web Site Using Webpage Designing Software

- [1] Mark joined in a drama union in the school and played a role in a drama. They've collected many wonderful pieces of **acts** in the video tapes.
- [2] A drama union Website for presenting wonderful works and releasing the newest program notice of the union.
- [3] Webpage designing software.
- [4] Adobe Creative Suite (CS) was a series of software suites of graphic design, video editing, and Web development applications made or acquired by Adobe Systems. The collections consisted of various groupings of Adobe's applications (e.g., Photoshop, Acrobat, InDesign, Premiere Pro, After Effects) based on various technologies (e.g., PostScript, PDF, Flash) and organized by industry. The last version of Adobe Creative Suite was CS6.
- [5] Adobe Fireworks CS6 software helps you create beautiful designs for Websites and mobile apps **in a snap**, without coding.
- [6] Adobe Dreamweaver CS6 Web design software provides an intuitive visual interface for making and editing HTML Websites and mobile apps.
- [7] A simple but complete Website.

### Words

**layman**

[ˈleɪmən] *n.* 外行

**camcorder**

[ˈkæmkɔːdə] *n.* 便携式摄像机

**act**

[ækt] *n.* 节目

### Phrases

in a snap

| 立刻, 马上

### Abbreviations

DVD

| Digital Video Disc

| 数字化视频光盘

## ➤ Listening Comprehension: The Software Giant — Microsoft

Listen to the passage and the following 3 questions based on it. After you hear a question, there will be a break of 10 seconds. During the break, you will decide which one is the best answer among the four choices marked (A), (B), (C) and (D).

### Questions

1. What is the relationship between Paul Allen and Bill Gates?
2. Which product introduced a graphical user interface first?
3. Which item is not included in the characteristics of the “cloud” computing?

### Choices

1. (A) Predecessor & Successor  
(B) Employee & Employer  
(C) Competitors  
(D) Partners & Schoolmates
2. (A) MS-DOS operating system  
(B) Macintosh operating system  
(C) Windows operating system  
(D) Linux operating system
3. (A) Connected via Windows  
(B) Provided over the Internet  
(C) Free of charge  
(D) Sold in a box

### Words

#### explode

[iks'pləʊd] v. 猛增

#### beneficiary

[beni'fɪʃəri] n. 受惠者, 受益人

#### dominance

['dɒmɪnəns] n. 优势, 统治

#### seamlessly

['si:mli:slɪ] adv. 无缝地, 连续地

## ➤ Dictation: Embedded Systems

This passage will be played three times. Listen carefully, and fill in the blanks with the words you have heard.

Embedded system is a \_\_\_\_\_ 1 \_\_\_\_\_ computer system that is \_\_\_\_\_ 2 \_\_\_\_\_ a larger system or machine, designed for a particular kind of application device. An embedded system is some combination of computer \_\_\_\_\_ 3 \_\_\_\_\_, either fixed in \_\_\_\_\_ 4 \_\_\_\_\_ or programmability.

In the earliest years of computers in the 1930-40s, computers were sometimes dedicated to a

single task, but were far too large and expensive for most kinds of tasks \_\_\_ 5 \_\_\_ by embedded computers of today. Over time however, the \_\_\_ 6 \_\_\_ of programmable controllers evolved from \_\_\_ 7 \_\_\_ electromechanical **sequencers**, via solid state devices, to the use of computer technology. One of the first \_\_\_ 8 \_\_\_ modern embedded systems was the Apollo Guidance Computer, developed by Charles Stark Draper at the MIT Instrumentation Laboratory.

Certain operating systems or language platforms are **tailored** for the \_\_\_ 9 \_\_\_, such as Embedded Java and Windows XP Embedded. However, some low-end consumer products use very inexpensive microprocessors and limited \_\_\_ 10 \_\_\_, with the application and operating system both part of a \_\_\_ 11 \_\_\_ program. Typically, an embedded system is \_\_\_ 12 \_\_\_ on a single microprocessor \_\_\_ 13 \_\_\_ with the programs permanently \_\_\_ 14 \_\_\_ in ROM, rather than being loaded into RAM, as programs on a personal computer are.

Embedded systems control many of the common devices in use today. \_\_\_ 15 \_\_\_ all **appliances** that have a digital interface — watches, microwaves, cameras, cars — \_\_\_ 16 \_\_\_ embedded systems. Since the embedded system is dedicated to specific tasks, design \_\_\_ 17 \_\_\_ can **optimize** it, \_\_\_ 18 \_\_\_ the size and cost of the product, or increasing the **reliability** and \_\_\_ 19 \_\_\_. Some embedded systems are mass-produced, benefiting from economies of \_\_\_ 20 \_\_\_.

### Words

#### **sequencer**

[ˈsi:kwənsə] *n.* 程序装置, 定序器

#### **tailor**

[ˈteɪlə] *v.* 裁剪

#### **appliance**

[əˈplaɪəns] *n.* 用具, 装置

#### **optimize**

[ˈɒptɪmaɪz] *v.* 使最优化

#### **reliability**

[rɪˌlaɪəˈbɪləti] *n.* 可靠性