

## Factual Background for Software Final Examination, Fall Term, 2003

*Think of these facts as ones learned during an "intake" interview with a new client. In the examination itself, there will be additional information and other events which take place against the background of this information. There may be issues potentially raised by these facts that will not require analysis in the examination. There may be other fact provided in the examination which raise issues not raised by these facts. Nevertheless, becoming familiar with these facts will be helpful in the examination. It is certainly my hope that reading these facts will give you additional assurance that the examination will not require expertise in computer programming.*

Annie Author is a young computer programmer who is developing what she believes to be an important software program. She met with one of our associates last week and, though somewhat reluctant to say much about the program, she came to our firm to discuss how she might protect her program from being copied by others without her consent. The firm has provided to her a written assurance of complete confidentiality which goes even beyond the normal rules of confidentiality which are part of the lawyer client relationship. I know that you will observe strict confidentiality, therefore, as I describe in this memorandum what Annie Author told our associate about her program now and what she believes it will be at later stages of its development

The program is designed to integrate the various devices in many of our homes which provide entertainment and, to a lesser degree, education for our families. Such devices include our television sets, cable boxes, radios, CD players, electronic game platforms, video cassette recorders and players, DVD players and computers, both wired and wireless. The goal is to enable the software to run on Windows, Macintosh and Linux computers and to be accompanied by installation software which would allow the user to identify by manufacturer and model number every one of the devices previously listed. Annie Author plans to have a web site from which users will be able to download additional software for additional kinds of devices or models of devices. There will be a modest subscription price which would, year by year, allow unlimited access to the web site to download these additional software programs as well as upgrades of the software program itself. Annie Author anticipates charging \$150 for the initial licensing of the software and a \$25 per year fee for the subscription price for years subsequent to the first year of purchase. The first year's access to the upgrade site would be without fee.

Of course in order to control all of these devices, Annie Author's program would have to imitate the commands issued by the controllers that are built in to these devices. In some instances, Annie Author's program would permit the user to make a use of the device being controlled that might be contrary to the license agreement or contractual agreement between the user and the lessor/seller of the device. This is particularly the case with control over the set-top

cable boxes used by the cable industry. For example, Annie Author's software would permit recording of cable programming without commercials and would facilitate the sharing of that programming with others by ordering the saving of the programming on DVDs that would be compatible with most DVD players. Her present plans include permitting alteration in some elements of game play on X-Boxes, PlayStations and other generally distributed game platforms.

She hopes to finish the current, development, phase of her work by the end of 2003. The product would then enter a alpha distribution. The software would be provided to a select number of individuals who are friends of Annie Author. Many of them are also programmers. After making necessary changes in the software to eliminate problems found by the alpha testers, the software would then enter the beta stage. Annie hopes to have at least 100 individuals who would be willing to be beta testers. Because of the nature of the program, these users should use all three target platforms and should have a variety of entertainment devices in their homes that this software could and should be able to control.

Annie has tentatively named her product Octopus since, as she counts the kinds of devices that it can control, there are eight. An artist friend has sketched a computer with eight arms reaching out to representations of each of the devices that the software can control. If you look closely at the drawing, a hand at the end of each arm seems to be stroking the device.

As far as we can understand it, the software would allow, for example, the user to instruct the VCR to record a particular TV program, pass the program content to a computer which would then compress the program using MPEG2, the software used to prepare video for DVD reproduction, cause the computer to hand the compressed file to a DVD burner and then order the DVD burner, at a particular hour, to play the DVD on any or on all designated devices, including computer monitors for any computer on the local area network, any TV in the home and any digital projector in the home.

Annie Author has assured us that there is no product on the market capable of managing so many different devices in so many different ways.

Annie Author has also told us that one of her friends has suggested that her project would be more powerful, and more commercially successful, if the software were written not for existing home computers but instead for a hardware device that would contain all of the code on a "mother board" consisting of a read only memory chip with the program's code and a "flash memory" chip to which the user could download the kind of additional software that Annie Author has in mind. Her friend has pointed out that this approach would make the device useful in the many home that have many entertainment devices but do not have computers and more useful also to those who do have computers but who might be baffled by the sophistication of Annie Author's software. Her friend has even made a sketch of the device. Since it would use embedded Linux, an operating system for which Annie Author is already writing her program, this approach would not involve much alteration in the code Annie Author has already written.

We have scheduled another appointment with Annie Author at 9 am, December 15, 2003. By that time we anticipate that further development of Annie Author's software and continued discussions between Annie Author and her friends may provide us with more specific information about her plans and more specific legal issues we will need to explore.

Annie Author arrived in our office this morning with an update on her software development efforts. These efforts have gone more rapidly than expected. She was able to distribute 50 copies of alpha versions of her software. The results of the alpha test have been very encouraging. The few "bugs" that have been reported by the alpha tests have already been corrected and she is ready to begin the beta test. She is confident that the program, should she decide to market it, should be ready during the second quarter of 2004.

### Question 1

(40 points; Suggested Time: 1 Hour)

#### **The following additional facts are applicable only to this question**

Every one of the alpha testers received the following form and returned it to Annie Author with their signatures:

#### CONFIDENTIALITY AND NONDISCLOSURE AGREEMENT

BE IT KNOWN, that Annie Author has or shall furnish to        (name of alpha tester) a computer program which shall be regarded as confidential information. Annie Author allows        (name of alpha tester) the right to make use of this computer program under the following conditions:

1.        (name of alpha tester) agrees to hold this confidential information in trust and confidence and agrees that it shall be used only for the contemplated purposes, shall not be used for any other purpose, or disclosed to any third party.
2. No copies will be made or retained of any written information or prototypes supplied without the permission of Annie Author.
3. At the conclusion of any discussions, or upon demand by Annie Author, all confidential information shall be returned to Annie Author.
4. Confidential information shall not be disclosed to any employee, consultant or third party unless they agree to execute and be bound by the terms of this Agreement, and have been approved by Annie Author.
5. This Agreement and its validity, construction and effect shall be governed by the laws of California.

AGREED AND ACCEPTED BY:

Date: _____	By _____
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By _____	Title _____
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One week after Annie sent the alpha version of her software to the 50 testers, she received a call from one of the testers. From the conversation she realized that the tester had gone well beyond testing. He had actually "decompiled" the software and was able to read the program code. The call was useful to Annie because he pointed out an area of the code which could be changed to run more efficiently. He had looked at this area of the code because, unlike most of the program, the program ran more slowly at this particular point. She was grateful for this insight, but not pleased that her program had been decompiled. She knew that the speed with which it was decompiled would not have been possible had she not disclosed to all of the beta testers the program she had used to compile her code.

The next day, another alpha tester's daily blog (an internet diary entry available to everyone on the internet) contained a description of the functions of her software. It did not include any code – only an English language description of its functions. The blog was very complementary, but Annie is concerned about its impact on her efforts to maintain secrecy.

Please provide an analysis of the impact of the actions of these two alpha testers on Annie's efforts to maintain her program as a trade secret. Was it a breach of the nondisclosure statement to publish the blog? Would its publication adversely affect the status of trade secret? What would the impact on trade secret be, if any, of the decompiling of Annie's program? Did it represent a breach of the nondisclosure agreement?

### Question 2

(40 points; Suggested Time: 1 Hour)

#### **The following additional facts are applicable only to this question**

Annie is thinking seriously about her friend's suggestion that instead of marketing her software to owners of personal computers, that she should work with him in incorporating her software into a controller that would look like the remote control device presently used to control television sets and video tape recorders. Incorporated in the device would be a central processor unit and enough memory to run her program. The linux operating system and her program would be on a ROM (read-only memory chip) embedded in the controller. In other words, the controller would itself be a small computer designed to be hand-held and designed solely to run Annie's program. To accommodate the need to add new devices that the buyer of the device might wish to control, the controller would have a "flash ROM" embedded in it that could receive programs by attaching the controller to a computer and downloading the needed additional software over the internet. Annie has determined that only small changes would be required in her program to combine it with a controller of this kind. She and her friend have completed a drawing of the device and a description of its specifications but they have not yet made an effort to build it.

Annie is considering applying for a patent either for the controller or for the computer

program or both. She knows that patent applications are expensive. Before she can make a decision about applying for a patent, she wants to know whether we believe the controller to be patentable and whether the computer program is patentable and what protection she would be provided by a patent on the controller or a patent on the computer program.

You have carried out a preliminary search in the Patent Office database. You have found three patents of relevance. Each has a single claim which might be related to Annie's program/controller:

(a) a patent claiming a portable device which, though not connected to a television or to a video tape or video cartridge player/recorder, can, with a beam of light produced by pressing buttons, change television channels, change television audio volume, advance or rewind tape, create a schedule for recording video or audio from the television to the tape and carry out other functions of which the television and video tape recorder are capable.

(b) a patent claiming a device, which, though not connected to a computer, allows a computer user to carry out all the functions of a computer otherwise carried out by keyboard, mouse, or other devices designed to control the behavior of the computer.

(c) a patent claiming a computer program which permits the computer user to edit video and audio data and record video and audio data, control cameras attached to the computer, causing them to play or record video material between the camera and the computer, and record the video or audio material on a device capable of inscribing on a disk, by the use of a laser, the video or audio material present on the hard drive of the computer, such that the disk could be played on a DVD player.

Please advise Annie about the present patentability of the (1) controller that she and her friend have designed and (2) her computer program and respond to her question about the scope of protection that would be provided by a patent on the controller and by a patent on her program.

### Question 3

(40 points; Suggested Time: 1 Hour)

#### **The following additional facts are applicable only to this question**

Assume for the purposes of this question that Annie, for financial reasons, has decided not to seek patent protection. Assume further that she has decided to market the software program and not to pursue the possibility of the controller.

Annie knows that there are many other programmers who are working on computer programs or on hardware devices designed to carry out the same functions as her program. She is concerned about the possibility that once her program begins to be marketed, some of these other programmers will immediately configure the programs they are working on to both look like her program on the computer screen and carry out the same functions.

She would like to know what sort of protection against her competitors is possible, Please

consider any and all alternatives, other than patent, and describe both what the alternatives are and what behaviors they would protect against. Include within your consideration the possible application of copyright, trademark and contract law.