Productivity Hint 1.2

Have a Backup Strategy

Develop a strategy for keeping backup copies of your work before disaster strikes.

You will spend many hours typing Java program code and improving it. The resulting program files have some value, and you should treat them as you would other important property. A conscientious safety strategy is particularly important for computer files. They are more fragile than paper documents or other more tangible objects. It is easy to delete a file accidentally, and occasionally files are lost because of a computer malfunction. Unless you keep a copy, you must then retype the contents. Because you probably won't remember the entire file, you will likely find yourself spending almost as much time as you did to enter and improve it in the first place. This costs time, and it may cause you to miss deadlines. It is therefore crucial that you learn how to safeguard files and that you get in the habit of doing so *before* disaster strikes. You can make safety or *backup* copies of files by saving copies into another folder, on a thumb drive, or on the Internet.

Here are a few pointers to keep in mind.

- *Back up often.* Backing up a file takes only a few seconds, and you will hate yourself if you have to spend many hours recreating work that you easily could have saved.
- *Rotate backups.* Use more than one place for backups, and rotate between them. That is, first back up onto the first backup destination, then to the second and third, and then go back to the first. That way you always have three recent backups. Even if one of them has a defect, you can use one of the others.
- *Back up source files only.* The compiler translates the files that you write into files consisting of machine code. There is no need to back up the machine code files, because you can recreate them easily by running the compiler again. Focus your backup activity on those files that represent your effort. That way your backups won't fill up with files that you don't need.
- *Pay attention to the backup direction.* Backing up involves copying files from one place to another. It is important that you do this right—that is, copy from your work location to the backup location. If you do it the wrong way, you will overwrite a newer file with an older version.
- *Check your backups once in a while.* Double-check that your backups are where you think they are. There is nothing more frustrating than finding out that the backups are not there when you need them.
- *Relax before restoring.* When you lose a file and need to restore it from backup, you are likely to be in an unhappy, nervous state. Take a deep breath and think through the recovery process before you start. It is not uncommon for an agitated computer user to wipe out the last backup when trying to restore a damaged file.