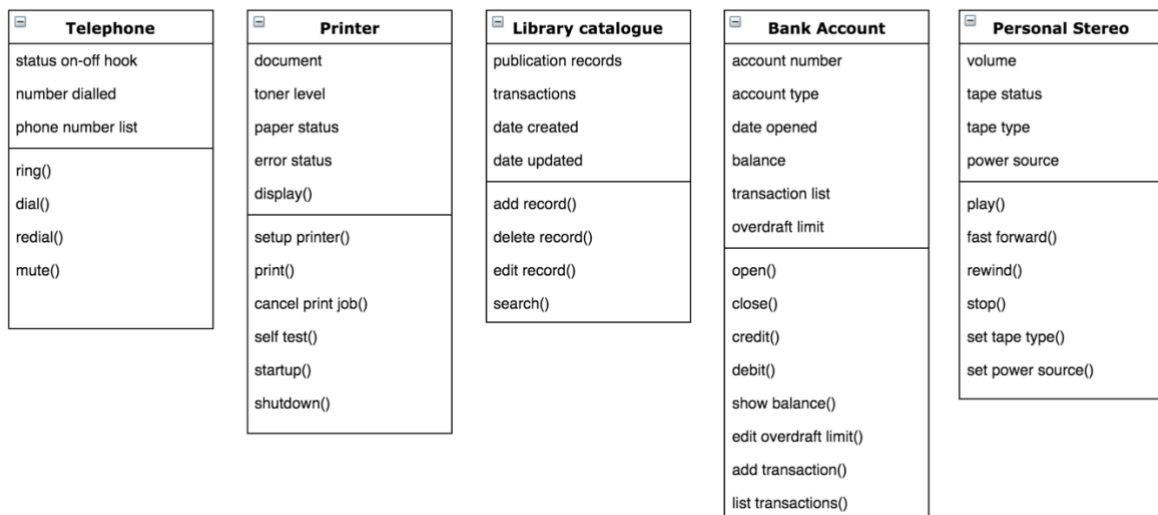# Software Engineering Assignment3

17011599 안정연

1. Using the UML graphical notation for object classes, design the following object classes, identifying attributes and operations. Use your own experience to decide on the attributes and operations that should be associated with these objects.

        a) a telephone

        b) a printer for a personal computer

        c) a personal stereo system

        d) a bank accounts

        e) a library catalogs

Telephone	Printer	Library catalogue	Bank Account	Personal Stereo
status on-off hook	document	publication records	account number	volume
number dialled	toner level	transactions	account type	tape status
phone number list	paper status	date created	date opened	tape type
	error status	date updated	balance	power source
ring()	display()		transaction list	
dial()		add record()	overdraft limit	play()
redial()	setup printer()	delete record()		fast forward()
mute()	print()	edit record()	open()	rewind()
	cancel print job()	search()	close()	stop()
	self test()		credit()	set tape type()
	startup()		debit()	set power source()
	shutdown()		show balance()	
			edit overdraft limit()	
			add transaction()	
			list transactions()	

2. Q. In a medical system that is designed to deliver radiation to treat tumors, suggest one hazard that may arise and propose one software feature that may be used to ensure that the identified hazard does not result in an accident.

A possible hazard is delivery of too much radiation to a patient. This can arise because of a system failure where a dose greater than the specified dose is delivered or an operator failure where the dose to be delivered is wrongly input. Software features that may be included to guard against system failure are the delivery of radiation in increments with operator display showing the dose delivered and the requirement that the operator confirm the delivery of the next increment. To reduce the probability of operator error, there could be a feature that requires confirmation of the dose to be delivered and that compares this to previous doses delivered to that patient. Alternatively, two different operators could be required to independently input the dose before the machine could operate.

3. Most desktop software, such as word processing software, can be configured in a number of different ways. Examine software that you regularly use and list the configuration options for that software. Suggest difficulties that users might have in configuring the software. If you use Microsoft Office or Open Office, these are good examples to use for this exercise.

List of configuration facilities in Microsoft Word:

1. Preferences screen
2. Customization screen
3. Organizer screen
4. Definition of templates
5. Definition of styles
6. Definition of macros
7. Inclusion of add-ins (e.g. Endnote)

In MS-Word 2007 there are difficulties to set a password to the document. It is not like previous versions where a menu bar is included. MS-Word 2007 has settings with all options (paragraphs, page layouts etc.) embedded in the relative tool but difficult to find. For example, word option is included in circular office button on upper left corner. The Options dialog box used to be accessible by choosing Options from the Tools menu in previous versions. It is impossible to see or print the settings of all system preferences on a single screen.