Object–based Data Type Development Using C++: Some Logical Associations
(by Lee S Koh)

Class Functions
- "big 4"
- default constructor
- copy constructor
- destructor
- assignment operator
- other constructors
- the rest minus 1

Class Functions
- constructors
- destructor
- the rest

Object Lifetime
- construction
- utilization
- destruction

Role Players
- client
- developer

guarantee "valid"

expect "fulfilled"

expect "valid"
(check "if valid" where possible)

guarantee "fulfilled"

Contract-Oriented Design
- preconditions
- postconditions
- class invariant

assume "not valid" on entry,
guarantee "(begins to be) valid" on exit

expect "valid" on entry,
don't care (if "still valid") on exit

expect "valid" on entry,
maintain "remains valid" on exit

Class Functions
- constructors
- destructor
- the rest

Contract Parties
- client-developer
- developer-developer

Contract-Oriented Design
- preconditions, postconditions
- class invariant

public function

non-public function

Program Components
- header files
- implementation files
- application (client) file