

# C

---

## Principles, rules, precepts and definitions

Providing constrained genericity	1187
Providing unconstrained genericity	1185
Absolute Negatives methodology principle	667
Absolute Positives methodology principle	667
Ada Exception rule	416
ADT specification of stacks	139
Advanced Curriculum principle	936
Advisory Rules methodology principle	668
Assertion Argument rule	997
Assertion Evaluation rule	402
Assertion Redeclaration rule (1)	573
Assertion Redeclaration rule (2)	578
Assertion Violation rule (1)	346
Assertion violation rule (2)	347
Business Card principle	990
Canonical Reduction rule	158
Catcall type rule	637
Choosing between client and inheritance	817
Class Consistency principle	730
Class Elicitation principle	725
Class Name rule	727
Class-ADT Consistency property	375
Classification of methodological rules	666
Command-Query Separation principle	751
Composite Feature Name rule	879
Consumer-to-producer strategy	943
Correctness rule for failure-inducing rescue clauses	429
Correctness rule for retry-inducing rescue clauses	429
Creation Inheritance rule	466
Default initialization values	233
Deferred class declaration rule	486
Deferred Class No-Instantiation rule	487
Definition: abstract side effect	757
Definition: ADT consistency	155
Definition: attachment	262
Definition: CAT (Changing Availability or Type)	638
Definition: Catcall	638
Definition: class correctness	370
Definition: class	142

Definition: class	165
Definition: client, supplier	182
Definition: compatibility	8
Definition: concrete side effect	749
Definition: conformance	474
Definition: correct ADT expression	154
Definition: correctness	4
Definition: deferred, effective class	142
Definition: deferred, effective class	486
Definition: direct dependents, dependents	250
Definition: direct instance, instance	475
Definition: ease of use	11
Definition: efficiency	9
Definition: entity	213
Definition: exception cases	413
Definition: exception	412
Definition: expanded type	255
Definition: extendibility	6
Definition: extension inheritance	826
Definition: facility inheritance	832
Definition: failure cases	414
Definition: final name	549
Definition: functional and type variation inheritance	829
Definition: functionality	12
Definition: implementation inheritance	832
Definition: object	218
Definition: operand and option arguments	766
Definition: origins, reachable and unreachable objects	290
Definition: Polymorphic call	638
Definition: Polymorphic entity	637
Definition: portability	11
Definition: processor	964
Definition: redeclaration	485
Definition: reference	224
Definition: referential transparency	750
Definition: reification inheritance	831
Definition: restriction inheritance	826
Definition: reusability	7
Definition: robustness	5
Definition: satisfiable call	1026
Definition: statically typed language	612
Definition: structure inheritance	831
Definition: subtype inheritance	825
Definition: sufficient completeness	155
Definition: system closure	196
Definition: system execution	195
Definition: timeliness	14
Definition: transition from analysis (specification) to design	150
Definition: tree	526
Definition: type violation	612
Definition: uneffecting inheritance	830
Definition: weight	157

Definitions: success, failure	412
Disciplined Exception Handling principle	417
Discrimination principle	655
Documentation principle	804
Dynamic Binding principle	511
Effect of a basic creation instruction	233
Effect of a creation call	237
Effect of calling a feature f on a target x	184
Emulating constrained genericity (1)	1178
Emulating constrained genericity (2)	1186
Emulating inheritance	1175
Emulating unconstrained genericity	1183
Exception Simplicity principle	434
Exceptions Included methodology principle	669
Expanded Client rule	259
Failure principle	420
Failures and exceptions	413
Feature Call principle	186
Feature Call rule	473
Fixing What Is Broken methodology principle	671
Garbage collector properties	305
Genericity in Repeated Inheritance rule	562
Goals of performing analysis	904
How the module-type merge works	185
How to distinguish options from operands	767
Inheritance rule	822
Inheritance Simplicity rule	823
Inheritance terminology	464
Initial training: the “hit them twice” strategy	935
Invariant inheritance rule	465
Invariant rule	366
“Is-a” rule of inheritance	811
Law of inversion	684
Linguistic Modular Units principle	53
Manager Training principle	937
Meaning of a correctness formula $\{P\} A \{Q\}$	335
Name clashes: definition and rule	562
Non-Redundancy principle	343
Non-strict boolean operators	454
OBJECT MOTTO	116
Object rule	171
Object-oriented software construction (definition 1)	116
Object-oriented software construction (definition 2)	147
Object-oriented typing problem	612
Once Function rule	653
Open-Closed principle	57
Operand principle	767
Parents’ Invariant rule	570
Persistence Closure principle	252
Polymorphism rule	817
Practical Basis methodology principle	665
Precondition Availability rule	358

---

---

Qualified Call rule	447
Real systems have no top	108
Reasonable Precondition principle	356
Repeated Inheritance rule	546
Reuse Experience methodology principle	666
Reuse Path principle	70
Role of genericity	97
Role of overloading	94
Rule of change	816
Select rule	555
Selective Export Inheritance rule	609
Self-Documentation principle	54
Semicolon Style principle	899
Semicolon Syntax rule	898
Separate Call rule	985
Separate call semantics	996
Separateness consistency rule (1)	973
Separateness consistency rule (2)	974
Separateness consistency rule (3)	975
Separateness consistency rule (4)	975
Shopping List advice	772
Sinecure 1	336
Sinecure 2	336
Single Choice principle	63
Single Name rule	549
Single Target principle	184
Software Correctness property	333
STACK AXIOMS	157
Static-dynamic type consistency	475
Symbolic Constant principle	884
System Validity rule	634
Taxomania rule	820
Terms to denote software woes	347
The reusability culture	929
Theoretical Basis methodology principle	665
Training Topics principle	936
Type Conformance rule	474
Type Redeclaration rule	598
Typing and binding	619
Uniform Access principle	57
Universal Class rule	580
Use Case principle	739
User Interface Design principle	12
Uses of entities of a formal generic type	324
Wait by necessity	989
Weight Consistency rule	156
Zero Weight rule	157