

CLI	GUI Command-driven	1
SE Pros and Cons		1
IDE		2
Testing	testing test case regression regression testing automated test case automated regression testing	3
Revision Control	revision control RCS DRCS vs CRCS revision repository remote repository	3
Refactoring		4
Debugging		4
Javadoc	Javadoc Markdown ASCIIDoc	4
Branching	branching merge types	4
Requirements	requirement brown/green-field project stakeholder FR/NFR Prioritizing requirements to gather requirements	5
Techniques for Specifying Requirements	prose feature list user story user case glossary supplementary requirement	6
JUnit Test	developer test delaying testing disadvantages test driver	8
Product Design	10 rules	9
Models		9
OO Structure	OO solutions	10
Class Diagram		10
Object Diagram		15
Sequence Diagram		15
Architecture Diagram	design architecture diagram	18
Logging		18
Assertions		18
Continuous Integration and Continuous Deployment	integration deployment	19

Architectural Styles	n-tier client-server event-driven transaction processing service-oriented	19
API		21
Code Readability	code quality	22
Avoid Unsafe Coding Practices		22
Software Design Principles	abstraction coupling cohesion SRP OCP SoC	23
Integration Approaches	early and frequent incremental bottom-up	25
Association Class		26
Testing	unit testing integration testing system testing user acceptance testing alpha/beta testing testability test coverage	26
Scheduling and Tracking Tools	milestone buffer issue tracker work breakdown structure GANTT charts program evaluation review technique charts team structure	28
Basic Design Approaches	top-down and bottom-up design agile design	31
Intermediate-Level Design Principles	polymorphism LSP LoD ISP DIP SOLID principles YAGNI principles DRY Brooks' law	31
Activity Diagram		33
Defensive Programming		35
Quality Assurance	validation & verification code review static analysis formal verification	35
Developer Doc	as user as maintainer	36
Object Oriented Domain Models		36

Design Patterns	singleton pattern facade pattern command pattern MVC observer design pattern	37
Test Case Design	script testing exploratory testing	40
Equivalence Partition		40
Boundary Value Analysis		41
Test Input Combination Strategies	all combinations at least once all pairs random	41
SDLC	sequential (waterfall) model iterative (and incremental) model agile models - scrum, XP	41
reuse	library frameworks platform	42