Software **D**evelopment **L**ife-**C**ycle

Phases	***Sub-phase***	**Across Life-Cycle Activities**						
		PM	FA	CM	(S)QA	(I)V&V	D	P
Planning/Definition		x	x	x	x	x	x	x
Requirements Specification		x	x	x	x	x	x	x
Analysis		x	x	x	x	x	x	x
Design								
	High Level (Architectural)	x	x	x	x	x	x	x
	Low Level (Detail)	x	x	x	x	x	x	x
Implementation (Coding)		x	x	x	x	x	x	x
Testing								
	Unit	x	x	x	x	x	x	x
	Functional	x	x	x	x	x	x	x
	System	x	x	x	x	x	x	x
	User Acceptance	x	x	x	x	x	x	x
Training		x	x	x	x	x	x	x
Intallation/Deployment								
	Abrupt/Cut-over ***OR***	x	x	x	x	x	x	x
	Pilot ***OR***	x	x	x	x	x	x	x
	Parallel ***OR***	x	x	x	x	x	x	x
	Phased	x	x	x	x	x	x	x
Maintenance								
	Debugging	x	x	x	x	x	x	x
	Maintenance (routine)	x	x	x	x	x	x	x
	Enhancements	x	x	x	x	x	x	x

Definitions, additional concepts

Modeling = performed during **A**nalysis and **D**esign
Milestone = usually at the end of each major **P**hase; includes formal **Reporting**
Activities = actions performed during each **P**hase
Tasks = actions performed during an activity
D = A + R/+C; **D** = Design, **A** = Analysis, **R** = Requirement, **C** = Constraint
System = Data + Process
System Modeling = Data Modeling + Process Modeling
Formal Review - performed during a **M**ilestone with a defined **P**rocess and **Checklist**
Deliverable (Product) = the result/outcome of activities performed during a **P**hase
PIR = **P**ost **I**mplementation **R**eview, a special review performed at the end of a complete life-cycle iteration
PM = **P**roject **M**anagement (includes **Risk Management**, **Cost/Budget Management**)
FA = **F**eseability **A**nalysis (includes **C**ost/**B**enefit **A**nalysis)
CM = **C**hange/**C**onfiguration **M**anagement
(S)QA = (**S**oftware) **Q**uality **A**ssurance
(I)V&V = (**I**ndependent) **V**erification and **V**alidation
D = **D**ocumentation (**System** and **User**)
P = **P**rocurement (**Hardware, Software, Workforce, Services**)
Each **P**hase requires **Planning**
Project Success = User Involvement + Management Commitment
Rational's Six Bset Practices = Develop Software Iteratively + Manage Requirements +
User Component Architectures + Visually Model Software +
Verify Software Quality + Control Change to Software