

Assignment #4

Due Date: 4/19/15 by 11:59pm

Deliverable: post your homework as a PDF file on Blackboard with the name "HW4_YourLastName"

- Consider the data listed in the following matrix for a product of size 39KLOC:
 - Calculate the defect removal rate for every phase
 - Calculate the defect injection rate for every phase
 - Calculate the defect escape rate for every phase
 - Which phase is the most effective in removing defects?
 - Calculate the overall defect removal effectiveness.
 - Do you think reviews and inspections were effective? Explain.
 - If the number of defects originated in requirements phase increased by 20% and defects detected in requirements review increased by 50%, do you think that will have a positive or negative impact on the defects originated in the coding phase? Explain your answer in detail (present data to support your answer).
 - If the number of defects originated in design phase increased by 30% and defects (defects escaped from prior phases and injected in current) detected in code inspections increased by 10%, do you think that will have a positive or negative impact on defect removal effectiveness for the testing phases? Explain your answer in detail (present data to support your answer).

Defect Origin									
Where Found		Requirement	Analysis	Design	Coding	Unit Testing	Integration Testing	System Testing	Field
	Requirement	50							
	Analysis	77	34						
	Design	13	39	102					
	Coding	26	31	65	344				
	Unit Testing	22	7	3	99	4			
	Integration Testing	22	6	2	55	-	3		
	System Testing	5	5	4	44	-	-	3	
	Field	2	2	1	9	-	-	-	2