## **Assignment #4**

**Due Date**: 4/1/18 by 11:59pm

## **Deliverable:**

Post your homework as a SINGLE PDF file on Blackboard with the name "HW4\_YourLastName\_ FirstName"

## **Important Notes:**

- Do NOT communicate or share your assignment with others
- Do NOT share your personal laptop with your classmates

## **Requirements:**

Consider the data listed in the following matrix for a product of size 120KLOC:

- 1. Calculate the defect removal rate for every phase
- 2. Calculate the defect injection rate for every phase
- 3. Calculate the defect escape rate for every phase
- 4. Calculate the overall defect removal effectiveness.
- 5. Which phase is the most effective in removing defects? Explain.
- 6. Do you think reviews and inspections were effective? Explain.
- 7. If the number of defects originated in design phase increased by 10% and defects detected in design review increased by 10%, do you think that will have a positive or negative impact on the defect removal effectiveness in the coding phase? Explain your answer in detail (present data to support your answer).

Defect Origin									
		Requirement	Analysis	Design	Coding	Unit Testing	Integration Testing	System Testing	Field
Where Found	Requirement	50							
	Analysis	24	45						
	Design	56	51	77					
	Coding	48	47	84	189				
	Unit Testing	22	14	38	78	12			
	Integration Testing	17	22	47	41	-	11		
	System Testing	11	12	16	33	-	-	19	
	Field	3	2	4	3	-	-	-	3