

Software Engineering Lab (CS3074) SPRING 2021-22

Lab Sheet-3 (Software Project Management-1)

Q.1 Calculate Unadjusted Function Point (UFP), Complexity Adjustment Factor (CAF) and Function Point (FP) for the following problem.

Number of user inputs	=32
Number of user outputs	=60
Number of user inquiries	=24
Number of files	=8
Number of external interfaces	=2

Assume all weighting factors to be average and all complexity adjustment values to be average.

Q.2 Calculate Unadjusted Function Point (UFP), Complexity Adjustment Factor (CAF) and Function Point (FP) for the following problem.

Number of user inputs	=24 (Weighting factor is average)
Number of user outputs	=46 (Weighting factor is simple)
Number of user inquiries	=8 (Weighting factor is complex)
Number of files	=4 (Weighting factor is average)
Number of external interfaces	=2 (Weighting factor is simple)

The various complexity adjustment values are 4, 1, 0, 3, 3, 5, 4, 4, 3, 3, 2, 2, 4, 5.

Q.3 For a project of 100,000 LOC embedded system, compute the effort and development time using intermediate COCOMO. Assume there are programmers of the low quality but a lot of experience with the programming language with all other attribute values being nominal. Value for low quality=1.17, value for lot of experience=0.95, nominal value=1.

Q.4 Consider an office automation system. There are 4 major modules:

Data Entry	0.6 KLOC
Data Update	0.6 KLOC
Query	0.8 KLOC
Reports	1.0 KLOC

The various cost driver attributes are of high complexity, high storage, low experience and low programmer capability with all others being nominal. Use intermediate COCOMO to estimate final effort, average staff size and total development time. Value for high complexity=1.15, value for high storage=1.06, value for low experience=1.13, value for low programmer capability=1.17, nominal value=1.