**Function Point Analysis - Example**

Estimate the number of lines of code (LOC) required to develop a software in C, C++, C# & Java programming languages. The function points are estimated as:

10 user inputs: 5 Simple + 3 Average + 2 Complex

12 user outputs: 5 Simple + 5 Average + 2 Complex

04 user inquiries: 2 Simple + 1 Average + 1 Complex

06 internal files: 2 Simple + 2 Average + 2 Complex

03 external file: 1 Simple + 1 Average + 1 Complex

Influence Factors: F2=4, F5=2, F8=3, F10=5, F12=2, Other Fi are set to 0.

Function Point Language Table: <https://www.qsm.com/resources/function-point-languages-table>

**Solution:**

Sum of 14 Fi = 4 + 2 + 3 + 5 + 2 = 16

10 user inputs = 5 Simple + 3 Average + 2 Complex

= 5 x 3 + 3 x 4 + 2 x 6

= 15 + 12 + 12

= **39**

12 user outputs = 5 Simple + 5 Average + 2 Complex

= 5 x 4 + 5 x 5 + 2 x 7

= 20 + 25 + 14

= **59**

04 user inquiries = 2 Simple + 1 Average + 1 Complex

= 2 x 3 + 1 x 4 + 1 x 6

= 6 + 4 + 6

= **16**

06 internal files = 2 Simple + 2 Average + 2 Complex

= 2 x 7 + 2 x 10 + 2 x 15

= 14 + 20 + 30

= **64**

03 external file = 1 Simple + 1 Average + 1 Complex

= 1 x 5 + 1 x 7 + 1 x 10

= 5 + 7 + 10

= **22**

Count Total = **39 + 59 + 16 + 64 + 22 = 200**

Function Point = count total x [0.65 + 0.01(Sum of 14 Fi)]

= 200 x [0.65 + 0.01 (16)

= 200 x [0.65 + 0.16]

= 200 x [0.81]

= 162 FP

**From Table:**

**LOC for C - Considering Avg: 97 LOC/FP**

LOC for C = 97 LOC/FP x 162 FP = 15,714 LOC

**LOC for C++ - Considering Avg: 50 LOC/FP**

LOC for C++ = 50 LOC/FP x 162 FP = 8,100 LOC

**LOC for C# - Considering Avg: 54 LOC/FP**

LOC for C # = 54 LOC/FP x 162 FP = 8,748 LOC

**LOC for Java - Considering Avg: 53 LOC/FP**

LOC for Java – 53 LOC/FP x 162 FP = 8,586 LOC