

Aim: Calculate Effort using fp oriented Estimation model for library Management System.

function point Analysis was initially developed by Allan J. Albercht in 1979 at IBM

FPA provides a standardized method to functionally size the Software Work product.

It is a set of rules of functional size measurement. It is used to analyze the functionality delivered by software and unadjusted function point is the measurement unit.

UFP is calculated by simply counting the value of each information domain and multiplying it by an appropriate weight at its complexity level.

CAA refers to the Complexity adjustment attributes. The CAA's are Complexity attributes that can vary from project to project. They are computed using the following relationship.

$$CAA = [0.65 + 0.01 \times \sum CAA_i]$$

	Simple	Average	Complex
Number of inputs	4	5	6
Number of outputs	5	6	8
Number of inquiries	3	5	7
No of internal logic file	7	11	14
External interfaces	4	6	10

For Library Management System assumed that it is an average Complexity Size project.

The Information Domain values are as follows. No. of inputs = 6, no. of outputs = 7, no. of inquiries = 3, no. of External files = 4, no. of interfaces = 2. Let us assume that the total value of Complexity adjustment attributes is 12.

1. Calculation of VFP for average Complexity Size project:

$$\begin{aligned} &= (\text{No. of inputs}) \times 5 + (\text{No. of outputs}) \times 6 + (\text{No. of inquiries}) \\ &\quad \times 5 + (\text{no. of internal logic files}) \times 11 + \\ &\quad (\text{External interfaces}) \times 6 \\ &= 6 \times 5 + 7 \times 6 + 3 \times 5 + 4 \times 11 + 2 \times 6 \\ \text{VFP} &= 123 + 20 = 143. \end{aligned}$$

2. Compute CAA, which has the value = 12

$$\begin{aligned} &0.65 \times 1 + 0.01 \times (12 \times 3) \\ &\quad \downarrow \\ &\quad \text{average Complexity} \\ &= 1.01 \end{aligned}$$

3. Compute FP = VFP \times CAA

$$\begin{aligned} &= 143 \times 1.01 \\ &= 144.43. \end{aligned}$$

Thus the total value of FP is 144.43.

FAQS

1. What is the purpose of COCOMO Model?
2. Why do we need to Estimate Effort?
3. What are different types of COCOMO Model?
4. How do we assume the values of Constants in the Calculation?
5. Who proposed COCOMO Model?
6. What is meant by cost drivers?
7. Why do we need Cost drivers?
8. What is the use of phase wise Estimation?
9. What is fp Analysis?
10. For what do we use fp Analysis?
11. How do we calculate WFP?
12. What are the Complexity adjustment attributes?

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