1) ~~Content~~ Discuss the function - point calc

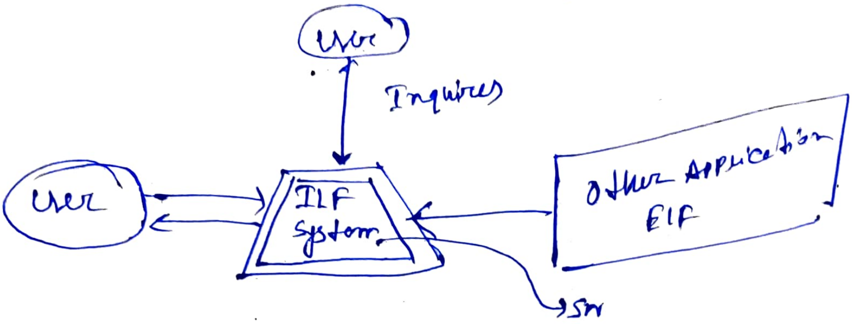
→ Function p.

Notes vd-12

Function Points :- It measures functionality from user's point of view.

↳ user receives from s/w + what the user requests from s/w.

• Focus on what is being delivered.



ILF : Internal logical files
EIF : External Interfaces

a system has 5 types of function units

1. ~~Intern~~ Internal Logical Files (ILF)
2. External Interface files (EIF)
3. External Inputs (EI)
4. External outputs (EO)
5. ~~Ext~~ Inquiries (EQ)

ILF : It controls info on logically related data that is present within the system.

EIF :- The control data on other logical data referenced by the system but present in another system. } Data function type

EI :- data control info that comes from outside our program

EO :- data goes out of the system after generation. } Transaction function type

FP → Combination of I/P · O/P resulting — 114

Step-1

Each function points is scored according to complexity there exists. Pre-defined weights for each FP in each category.

Low
Average
High

Functional Units i↓	j→ Weighting Factors Low	Average	High
EI	3	4	6
EO	4	5	7
EQ	3	4	6
ILF	7	10	15
EIF	5	7	10

Function unit

Step 2

Calculating unadjusted Function (UFP) point by multiplying each FP by its corresponding weight factor.

$$UFP = \sum_{i=1}^{5} \sum_{j=1}^{3} (Z_{ij} * W_{ij})$$

→ Count of functional unit in category classified as complexity

5 EI → Low
6 EO → High

UFP → (5 * 3 + 6 * 7)

— How to assign weights or rank for function points?

↳ Dependant on the organization.

↳ Based on past projects.

Step 3

Calculate final function point

Final F.P = UFP × CAF

Calculated using 14 aspect of processing complexity

14 questions answered on a scale of 0 to 5

0 → No Influence
1 → Incidental
2 → Moderate
3 → Average
4 → Significant
5 → Essential

$CAF = [0.65 + (0.01 \times \Sigma F_i)]$

$\Sigma F_i = 14 \times \text{scale}$

Ex: Given the following values, compute F.P value assuming complexity adjustment factor (CAF) and weighting factors are average.

→ User I/P = 50
User O/P = 40
User Enquiries = 35
User files = 6
External interfaces = 4

(1) $\sum_{i=1}^{14} F_i = 14 \times 3 = 42$

(2) $UFP = \sum_{i=1}^{5} \sum_{j=1}^{3} z_{ij} w_{ij}$

4, 5, 4, 10, 7

$= 50 \times 4 + 40 \times 5 + 35 \times 4 + 6 \times 10 + 4 \times 7$
$= 200 + 200 + 140 + 60 + 28$
$= 628$

(3) $CAF = 0.65 + 0.01 (\Sigma F_i)$
$= 0.65 + 0.01 \times 42$
$= 0.65 + 0.42$
$= 1.07$

4

65
42
107

(4) FP = 628 × 1.07

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