# **Practical – 8**

**AIM: Apply FP oriented estimation model for selected application.**

1. **Identify the Functional Components**

**External Inputs (EI) – Inputs from the user:**

* User login
* User registration
* Data entry
* Updating data

Total EI = 4

**External Outputs (EO) – Outputs generated by the system:**

* Generate report
* Display user details
* Dashboard statistics

Total EO = 3

**User Inquiries (UI) – Interactive data retrieval:**

* Search
* Filter

Total UI = 2

**Internal Logical Files (ILF) – Internal databases:**

* User database
* Activity log
* System configuration/settings

Total ILF = 3

**External Interface Files (EIF) – External data sources used:**

* External authentication system

Total EIF = 1

1. **Assign Weights**

(Assumed complexity = average unless stated)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Component Type** | **Count** | **Complexity** | **Weight** | **Total** |
| EI | 4 | Average | 5 | 20 |
| EO | 3 | Average | 5 | 15 |
| UI | 2 | Low | 4 | 8 |
| ILF | 3 | Average | 10 | 30 |
| EIF | 1 | Average | 7 | 7 |

**Step 3: Calculate Unadjusted Function Points (UFP)**

UFP = 20 + 15 + 8 + 30 + 7 = 80

**Step 4: Apply Value Adjustment Factor (VAF)**

Assume VAF = 1.1 (based on general system characteristics)

**Step 5: Calculate Adjusted Function Points (AFP)**

AFP = UFP × VAF = 80 × 1.1 = 88

**Step 6: Estimate Effort**

Assume Productivity rate = 20 function points/person-month

Effort = AFP / Productivity rate = 88 / 20 = 4.4 ≈ 4 person-months