**Function Point Estimation**

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| --- | --- | --- | --- | --- | --- |
| **Functionality** | **Input** | **Output** | **Queries** | **File** | **Program Interface** |
| Login | 2 | 0 | 1 | 0 | 1 |
| Comment | 1 | 1 | 1 | 0 | 1 |
| Post | 2 | 2 | 1 | 0 | 1 |
| Search | 1 | 1 | 1 | 0 | 1 |
| Enroll | 1 | 0 | 1 | 0 | 1 |
| Upload file | 1 | 0 | 1 | 0 | 1 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Complexity** | | | | |
| **Description** | Total # | Low | Medium | High | Total |
| Inputs | 8 | 2\*3 | 4\*4 | 2\*6 | 34 |
| Outputs | 4 | 1\*4 | 2\*5 | 1\*7 | 21 |
| Queries | 6 | 1\*7 | 4\*10 | 1\*15 | 62 |
| Files | 0 | 0\*7 | 0\*10 | 0\*15 | 0 |
| Program interface | 6 | 1\*5 | 4\*7 | 1\*10 | 43 |
| Total Unadjusted Function Point (TUFP) = | | | | | 163 |

**Total processing complexity (PC):**

Complexity is from 0 to 3: (0=no effect on project complexity; 3=great effect on project complexity)

|  |  |
| --- | --- |
| **Tasks** | **Complexity (0-3)** |
| Data communication | 3 |
| Team cohesion | 1 |
| Familiarity with technology | 3 |
| Online data entry | 2 |
| File and data storage | 3 |
| Use of existing packages and APIs | 3 |
| Total Processing Complexity (TPC)= | 15 |

**The adjusted processing complexity (APC):**

APC=0.65 + (0.01 \* TPC)

APC=0.65+(0.01\*15)=0.80

**The total adjusted function points (TAFP):**

TAFP=TUFP\*APC

TAFP=163\*0.80=130.4

**Converting Function Points to Line of Code (LOC):**

JavaScript: 47 lines/FP

Total lines of code in JavaScript: 130.4\*47=6128.86100 lines of code

**Estimating the effort:**

Effort = 2.4\*LOC/1000

= 2.4\*6128.8/1000

= 14.709 person month

**Estimating the schedule time:**

Time =

months

**Estimating the number of persons:**

Average of # of persons = effort/time

=14.709/6.94

=2.12 persons