

## FUNCTIONAL POINT ANALYSIS

S - Simple

A-Average

C-Complex

### FUNCTION POINTS WEIGHTS :

	Simple(S)	Average(A)	Complex(C)
Inputs	2	4	6
Outputs	3	5	7
Data Stores	5	10	15
Processing Inquires	2	4	8
Processing Updates	4	8	12
External Interfaces	4	6	8

### Inputs-

- 1) Add Signup details (C)
- 2) Add new event (C)
- 3) Approve new event created (S)
- 4) Approve new team (S)
- 5) Modify event (C)
- 6) Delete event (S)
- 7) Add query (A)
- 8) Add response to query (A)
- 9) new team registration (C)
- 10) modify team details (C)
- 11) delete Team details (S)
- 12) change password(S)
- 13) error message when signup for incorrect fields (S)
- 14) forgot password(S)

Data Elements (DET-s):

Files Referenced(FTR-s)	1 –4	4– 15	> 15
1	Low (5)	Low (0)	Average (0)
2	Low (2)	Average (2)	High (1)
>2	Average (0)	High (2)	High (2)

#### Outputs-

- 1) Reset Password(A)
- 2) Password Change Confirmation(S)
- 3) Home page (C)
- 4) Access event details page(C)
- 5) Event details Submission Confirmation(S)
- 6) Team details Submission Confirmation(S)
- 7) Query Submission Confirmation(S)
- 8) Query response Submission Confirmation(S)
- 9) Event approval Confirmation(S)
- 10) Event schedule (C)

#### Data Elements (DET-s):

Files Referenced(FTR-s)	1 –5	6– 19	> 19
1	Low (2)	Low (0)	Average (0)
2-3	Low (3)	Average (2)	High (3)
>3	Average (0)	High (0)	High (0)

#### Processing Updates-

- 1) Password Change (S)
- 2) Event Page Update (C)
- 3) Team details update (C)
- 4) Query/response update (A)
- 5) Teams list update (A)

#### Data Elements (DET-s):

Files Referenced(FTR-s)	1 –5	6– 19	> 19
1	Low (1)	Low (0)	Average (0)
2-3	Low (0)	Average (1)	High (2)
>3	Average (1)	High (0)	High (0)

#### Processing Inquiries-

- 1) Login details(A)
- 2) View Event details page(C)
- 3) Fetch team details(C)
- 4) View queries(A)
- 5) View my created events(C)
- 6) View my team details(A)

#### Data Elements (DET-s):

Files Referenced(FTR-s)	1 –5	6– 19	> 19
1	Low (0)	Low (0)	Average (0)
2-3	Low (0)	Average (3)	High (3)
>3	Average (1)	High (0)	High (0)

#### External Interface Files (EIF)-

- 1) Student List from MIS(A)
- 2) Faculty List from MIS(A)

#### Data Elements (DET-s):

.Record Elements(RET-s)	1 – 19	20 – 50	> 50
1	Low (0)	Low (0)	Average (0)
2-5	Low (0)	Average (2)	High (0)
>5	Average (0)	High (0)	High (0)

#### Data Stores

- 1) Team details(A)

- 2) Query(S)
- 3) Event details(A)
- 4) login details(for organizer and DoSA) (A)

Data Elements (DET-s):

Record Elements(RET-s)	1 – 19	20 – 50	> 50
1	Low (1)	Low (0)	Average (0)
2-5	Low (0)	Average (3)	High (0)
>5	Average (0)	High (0)	High (0)

FUNCTION POINT COUNT:

	SIMPLE	AVERAGE	COMPLEX
INPUTS	7	2	5
OUTPUTS	6	1	3
UPDATES	1	2	2
INQUIRIES	0	3	3
EXTERNAL INTERFACE	0	2	0
DATA STORES	1	3	0

Global Factors

Rank

In our project Event management, efficient and smart ways to form teams and coordination between them and mass communication to LNM Residents is important. Therefore, main focus is on the Data communications, performance, user efficiency.

1	Data communications	4
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2	Distributed data processing	3
3	Performance	5
4	Heavily used configuration	1
5	Transaction rate	0
6	On-Line data entry	4
7	End-user efficiency	5
8	On-Line update	4
9	Complex processing	3
10	Re-usability	4
11	Installation ease	5
12	Operational ease	5
13	Multiple sites	3
14	Facilitate change	4

1. Unadjusted function point calculation:

Input -  $(7*2)+(2*4)+(5*6) = 52$

Output -  $(6*3)+(1*5)+(3*7) = 44$

Updates -  $(1*4)+(2*8)+(2*12) = 44$

Inquiries -  $(3*4)+(3*8) = 36$

Data stores -  $(1*5)+(3*10) = 35$

External interface files -  $(2*6) = 12$

Total =  $52+54+44+28+35+12 = 223$

2. Adjusted Influence -

50

3. Complexity adjustment factor -

$0.65 + (0.01 * 50) = 1.15$

4. Adjusted function point -

$223 * 1.15 = 256.45$

But how long will the project take and how much will it cost?

- Software professionals in our organization perform at an average of 10 function points per month.

256.45 Adj-FP divided by 10 = ~26 person-months.

- If the average software professional is paid Rs 2L per month (including benefits and overheads), then the personnel cost of the project will be :

26 person-months X Rs 2L = Rs 52L