System Size

Function Point Estimation

Functionality	Input /External Inputs	Output/External Outputs	Queries /External Inquiries	File /internal Logical Files	Program interface/External Interface Files
Search nearby providers (medium)	1	5	0	1	1
Search using Health insurance (medium)	2	5	0	1	1
Logging in (Easy)	2	1	0	1	0
Registration (Easy)	2	1	0	1	0
Booking an appointment (Easy)	3	3	0	1	0
Opening Zoom from the application (High)	1	1	0	1	1
Upload medical documents (High)	1	1	0	1	0
Download medical documents (High)	1	1	0	1	0
View patient details (Easy)	1	1	0	1	0
View treatment provider details (Easy)	1	1	0	1	0

	Complexity				
Description	Total #	Low	Medium	High	Total
Inputs	**15**	9*** 3**	3***4**	3***6**	**57**
Outputs	**20**	7***4**	10***5**	3***7**	**99**
Queries	**0**	0***7**	0***10**	0***15**	**0**
Files	**10**	**5*7**	**2*10**	3***15**	**100**
Program interface	**3**	0***5**	**2*7**	**1*10**	**24**
Total Unadjusted Function Point (TUFP) =					280

The 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	2
Familiarity with technology	3
On-line data entry	3
Total Processing Complexity (TPC)=	11

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

  APC=0.65 + (0.01 * TPC)

  APC=0.65 + (0.01 * 11)= 0.76

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

  TAFP=TUFP * APC

  TAFP= 280*0.76= 212.8

- **Converting Function Points to Line Of Code (LOC):-**

Language/Tool	Number of LOC / FP
HTML	15
Javascript	71.11
Python	53.33

Just an Example Reference

- 60% will be done in Python
- 10% will be done in HTML
- 30% will be done in Javascript

- **Number of lines of code (LOC)= TAFP * # of(LOC\FP) * %**

For Javascript = (212.8) *(71.11)*(30/100) = 4,539.66 LOC

For HTML = (212.8) *(15)*(10/100) = 319.2 LOC

For Python = (212.8) *(53.33)*(60/100) =6,809.17 LOC

So the total LOC=11,668.03 LOC

- **Estimating the effort:-**

Effort = 2.4 *(LOC/1000)^1.05

=2.4*(11,668.03/1000)^1.05

=31.66 person month

- **Estimating the schedule time:-**

Time = 2.5 * (effort) $^{0.38}$

=2.5* (31.66) $^{0.38}$

=9.29 months

- **Estimating the number of persons:-**

average of # of persons = effort/time

= 31.66 /9.29

= 3.41 persons