System Size

Function Point Estimation

Functionality	Input	Output	Queries	File	Program interface
Search Drug	4	10	1	1	0
Get Drug	1	1	1	1	0
Create Drug	11	1	1	1	0
Save Drug	1	1	1	1	0
Edit Drug	11	1	1	1	0
Registration	4	1	1	2	0
Login	2	1	1	2	0
Logout	1	0	1	1	0
Authenticate with session	1	1	1	2	0
Generate QR code	1	1	1	1	0
View Profile	1	1	2	0	0

	Complexity				
Description	Total	Low	Medium	High	Total
Inputs	**38**	9***3**	29***4**	0***6**	**143**
Outputs	**19**	5***4**	12***5**	2***7**	**94**
Queries	**12**	9***7**	3***10**	0***15**	**93**
Files	**13**	9***7**	3***10**	1***15**	**108**
Program interface	**0**	0***5**	0***7**	0***10**	**0**
Total Unadjusted Function Point (TUFP) =					438

The total processing complexity (PC):-

Complexity is from 0 to 5: (0=no effect on project complexity; 5=great effect on project complexity)

Tasks	Complexity (0-5)
Data communication	3
Transaction rate	0
End-user efficiency	2
Installation ease	0
Multiple site	3
Performance	1
Distributed data processing	1
Online data entry	5
Online updating	2
Reusability	2
Operational ease	1
Extensibility (Facilitate change)	0
Total Processing Complexity (TPC)=	20

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

  APC = 0.65 + (0.01 * TPC)

  APC = 0.65 + (0.01 * 20) = 0.85

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

  TAFP = TUFP * APC

  TAFP = 438 * 0.85= 372.3

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

Language/Tool	**Number of LOC / FP**
HTML	15

Javascript (interpreted)	64
C#	51.2
TranscriptSQL	12.8

Percentages of languages use in system

- 30% will be done in C#
- 30% will be done in HTML
- 30% will be done in JS
- 10% will be done in SQL

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

Language/Tool	**LOC**
HTML	1675.35
Javascript (interpreted)	7148.16
C#	5718.53
TranscriptSQL	476.544
Total Number of lines	15018.582

- **Estimating the effort:-**

  Effort = 2.4 * LOC/1000
  = 2.4*15018.582/1000
  = 36.04 person month

- **Estimating the schedule time:-**

  Time = 2.5 * (effort) $^{0.38}$
  = 2.5* (36.04) $^{0.38}$
  = 9.76 months

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

  Average of # of persons = effort/time
  = 36.04 /9.76
  = 3.69 persons