System Size

Function Point Estimation

Functionality	Input	Output	Queries	File	Program interface
Customer Search	1	1	1	1	0
Customer Order	1	1	1	2	0
Customer Rating	1	1	1	1	0
Registration	1	1	2	2	0
Customer Pay	1	1	1	1	1
Seller Add Food	1	1	1	1	0
Seller Push Delivery	1	1	1	1	1

	Complexity			
Description	Total #	Low	Medium	High	Total
Inputs	7	5* **3**	1***4**	1***6**	25
Outputs	7	5***4**	2***5**	0***7**	30
Queries	8	4***7**	4***10**	0***15**	68
Files	9	6***7**	3***10**	0***15**	72
Program interface	2	0***5**	1***7**	1***10**	17
Total Unadjusted Function Point (TUFP) =					212

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	5
Transaction Rate	4
End-user Efficiency	4
Multiple Sites	3

Performance	3
Online Data Entry	5
Online Update	3
Total Processing Complexity (TPC)=	27

- **The adjusted processing complexity (APC):-**
  APC=0.65 + (0.01 * TPC)
  APC=0.65 + (0.01 * 27)= 0.92

- **The total adjusted function points (TAFP):-**
  TAFP=TUFP * APC
  TAFP= 212*0.92= 195.04

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

Language/Tool	Number of LOC / FP
Python	53
HTML	15
SQL	21

- 70% will be done in Python
- 10% will be done in HTML
- 20% will be done in SQL

- **Number of lines of code (LOC)= TAFP * # of(LOC\FP) * %**
  For Python = (195.04) *(53)*(70/100) = 7236 LOC
  For HTML = (195.04) *(15)*(10/100) = 292.56 LOC
  For SQL = (195.04) *(21)*(20/100) = 819.17 LOC
  So the total LOC=8347.73 LOC

- **Estimating the effort:-**
- Effort = 2.4 * $(LOC/1000)^{1.05}$
           =2.4*$(8347.73/1000)^{1.05}$
           =22.28 person month

- **Estimating the schedule time:-**
  Time = 2.5 * (effort)$^{0.38}$

      =2.5* (22.28)$^{0.38}$

      =8.13 months

- **Estimating the number of persons:-** average of # of
  persons = effort/time

          = 22.28 /8.13
          = 2.74 persons