Function Point Approach: System Size

System Components

		Complexity			
Description	**Total Number**	**Low**	**Medium**	**High**	**Total**
Inputs	4	1 * 3	2 * 4	1 * 6	**17**
Outputs	4	0 * 4	1 * 5	3 * 7	**26**
Queries	5	1 * 7	2 * 10	2 * 15	**57**
Files	5	1 * 7	2 * 10	2 * 15	**57**
Program Interfaces	6	2 * 5	1 * 7	3 * 10	**47**
TOTAL UNADJUSTED FUNCTION POINTS (TUFP)					**204**

Low	Medium	High
* 3	*4	*6
*4	*5	*7
*7	*10	*15
*7	*10	*15
*5	*7	*10

Overall System

Data communications	2
Heavy use configuration	0
Transaction rate	0
End-user efficiency	0
Complex processing	0
Installation ease	0
Multiple sites	0
Performance	1
Distributed functions	0
Online data entry	2
Reusability	1
Operational ease	1
Extensibility	0
Total Processing Complexity (PC)	**7**

Adjusting Function Points

Adjusted Processing Complexity (PCA) = 0.65 + (0.01 * 7) = 0.72
Total Adjusted Function Points: 0.72 * 204 = **147**

Total Adjusted Function Points: 147

Lines of Code

Javascript ~21 LOC/FP -> 147 * 21 = 3,087

JavaScript Lines of Code: 3,087

Effort Required

PROJECT	a	b
Organic	2.4	1.05
Semi Detached	3.0	1.12
Embedded	3.6	1.20

$$E = a * (KLOC)^b$$

Our project is organic

E = 2.4 * (3.087)^1.05 = 7.8

The Effort required is 7.8 person-months

Time Required

PROJECT	c	d
Organic	2.5	0.38
Semi Detached	2.5	0.35
Embedded	2.5	0.32

$$Tdev = c * (E)^d$$

Our project is organic

Tdev = 2.5 * (7.8)^0.38 = 5.5 months

The Time of Development required is 5.5 months