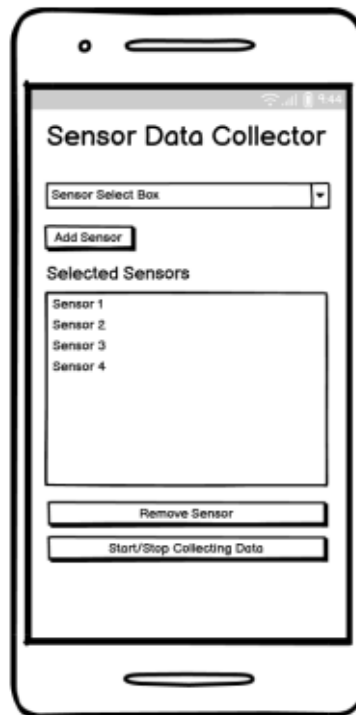


## Exercise 04 Cost/Time Estimation



Method: Widget Points

WIDGET	WIDGET ELEMENT	WIDGET POINTS (WP)
INPUT	Add sensor button	3
	Remove Sensor button	
	Stop/Start collecting button	
DESCRIBING		0
COMPOSITE	Selected Sensors List	1
MENU	Sensor Select Box	1
SUM		4

Requirement	Classified	Value
Programming Language	C++/Java	53
Project Type	Organic (simple)	a=3.2; b=1.05
Complexity of The Product	low	0.85
Response Times	high	1.07

ITEM	EQUATION	VALUES	RESULT
<b>FP (FUNCTION POINTS)</b>	$FP = 2 * WP$	WP = 4	8
<b>LOC (LINES OF CODE)</b>	$LOC = FP * L$	FP = 8 L (C++/Java) = 53	424
<b>E<sub>i</sub> (EFFORT IN PERSON MONTH)</b>	$E_i = a * KDL^b$	a = 3.2 b = 1.05 KDL = 0.742	1.3
<b>E (CORRECTED E<sub>i</sub>)</b>	$E = EAF * E_i$	EAF = 0.85 * 1.07 = 0.9	1.16
<b>D (LENGTH [MONTH])</b>	$D = 2.5 * E^{0.38}$	-	2.65
<b>P (AVERAGE DEMAND OF EMPLOYEES)</b>	$P = \frac{E}{D}$	-	0.43 -> 1
<b>COST</b>	$C = G * D$	G (salary)* = 8550 chf	22657 chf

Answer: The project would last 2.65 months and would cost around 22657chf.

\*The average monthly salary has been calculated with <https://www.lohnrechner.ch/>. Results are attached in the file Lohnrechner.pdf