The following is an estimated budget for the automation team for Solar Decathlon.

In order to reach the below values we assume the house has one bedroom, one bathroom, one main room, and a kitchen attached to the main room. We assume prototypes pricing which may reduce with slimmer final products.

Right now data collection is carried out through existing technologies, namely the Raspberry Pi and Arduino. Sensorica and Equipmind are working on newer, slimmer technologies designed specifically for home automation with this project in mind.

I've allocated unknown expenses, such as audio collection, to be 1000 CAD.

Regarding flexibility, right now 3 Raspberry Pi's are devoted to the Bedroom and 2 to the kitchen and 6 to the main room. Costs can be cut considerably by removing some of these units, which will include removing cameras and sensors, but this may limit the capabilities of the home. The humidity and temperature sensors can be similarly reduced.

Report of Preliminary Budget Estimation

Activity	Rate/Unit	Count	Amount (CAD)
Raspberry Pi Units Mainroom	115	6	690.00
Raspberry Pi Units Bedroom	115	3	345.00
Raspberry Pi Units Kitchen	115	2	230.00
Arduino (Spark)	80	9	720.00
Miscellaneous Arduino Parts	20	9	180.00
DHT22 temperature-humidity sensor	10	5	50.00
Spark Power Outlet, Sensors, and Controllers	60	10	600.00
PC Casing	120	1	120.00
PC Motherboard	160	1	160.00
PC Radeon Graphics Processor	200	1	200.00
PC 600-750 W Power Supply (price for 850W)	140	1	140.00
PC FX Central Processor	200	1	200.00
PC 250GB Solid State Drive	150	1	150.00
PC 8GB RAM	80	1	80.00
PC Cooling Units	50	1	50.00
Unknown Expenses in Description	1	1000	1000.00
Subtotal Fees			4915.00
Subtotal Report of Preliminary Budget Estimation			4915.00
Sum Fees			4915.00
Total			**4915.00**

Thanks,

Calem J Bendell