

1. Budget

The cost of this project is divided into three sections: the cost of the hardware and equipment, the price of the software used, and the price of the labor.

We will consider the project to have a 6-month duration, working 4 hours a day for 6 days a week.

1.1. Hardware cost

For electronics, we consider that the equipment lasts for 5 years. A 6-month period represents 10% of the total expected lifespan of electronic equipment. The laptop is used to work on the project but is not a part of the device, so it is reflected in the budget as the percentage of its lifetime dedicated to the project.

The other electronic components are integrated in the final product, and one of each must be bought in order to create more devices, so their full price is reflected in the budget.

CONCEPT	UNIT COST	QUANTITY	SUBTOTAL
Laptop: MSI GP62M 7RDX Leopard	1200.00 €	10 %	120.00 €
Accelerometer and Gyroscope MPU6050	6.37 €	1	6.37 €
GPS module GY-NEO6MV2	9.90 €	1	9.90 €
Heltec CubeCell AB01	15.83 €	1	15.83 €
Solar Panel	2.14 €	1	2.14 €
LiPo Battery	8.84 €	1	8.84 €

Table 1- Subtotal of the hardware cost

SUBTOTAL:.....163,08 €

1.2. Software cost

CONCEPT	UNIT COST	QUANTITY	SUBTOTAL
Arduino IDE	0 €	1	0 €
Visual Studio Code + PlatformIO	0 €	1	0 €
The Things Network	0 €	1	0 €
Microsoft 365	69.00 € / year	50 %	34.50 €

Table 2 - Software cost

SUBTOTAL: **34.50 €**

1.3. Labor cost

The cost of labor was influenced by the conditions of the FUI grant under which I was working for the first four months. That salary was approximately 7.24 € / hour. We will simulate an hourly pay of 20 € / hour for the remaining time period of two and a half months, working around 200 hours. (2.5 months working 4 hours a day, 5 days a week, 4 weeks per month).

CONCEPT	UNIT COST	QUANTITY	SUBTOTAL
Working period – late September	579.51 € / month	0.493 months	285.51 €
Working period - October	579.51 € / month	1 month	579.51 €
Working period - November	579.51 € / month	1 month	579.51 €
Working period – December	579.51 € / month	0.996 months	577.07 €
Rest of working period	20 € / hour	200 hours	4000 €

Table 3 – Labor cost

SUBTOTAL:..... **6021.60 €**

1.4. Total cost of the Project (cost of material execution)

CONCEPT	SUBTOTAL
Hardware costs	163.08 €
Software costs	34.50 €
Labor cost	6021.60 €

Table 4 - Total cost of the project

TOTAL COSTS: **6219.18 €**

1.5. General cost, Industrial Benefit and Total amount

The general costs and the industrial benefit are two mandatory increase in the cost that come from using the work installations and a benefit to be gained. We will estimate a percentage of 15% over the cost of material execution.

CONCEPT	SUBTOTAL
General costs and industrial benefit	932.88 €

Table 5 - General costs and industrial benefit

To finish with the budget, here is the final amount of the cost, the associated taxes, and the total price of the project.

CONCEPT	SUBTOTAL
Total cost of the project	6219.18 €
General costs and industrial benefit	932.88 €

Table 6 - Summary of the amount

TOTAL: 7,152.06 €

IVA 21%: 1,501.93 €

TOTAL, INCLUDING IVA: 8,653.99 €

The total amount of the project sums up to:

Eight Thousand Six Hundred Fifty-Three Euros and Ninety-Nine Cents.

Signed: Álvaro Alemany Suárez