

## COST ESTIMATING AND BUDGETING

# **EXERCISE SOLVED**

### DESCRIPTION

This document summarizes the answers to the exercise so that students can evaluate their work by comparing their answers to the ones in this document.

#### **QUESTIONS AND ANSWERS**

1. Calculate the user manual work package cost based on the calculation of the cost of each one of the activities.

Calculations are shown in the following table:

ID	Paquete de Trabajo	Activity	Description	Cost	Quantity	Total cost	Technique
1.4.1.3.	User manual	1.4.1.3.1.	Write the document	120	3	360	Parametric
1.4.1.3.	User manual	1.4.1.3.2.	Review style and orthography	500	1	500	Analogous
1.4.1.3.	User manual	1.4.1.3.3.	Diagram document	280	1	280	Analogous
1.4.1.3.	User manual	1.4.1.3.4.	Print three copies	5	372	1.860	Parametric
				Work package cost		3.000	

2. Identify the technique used to calculate the cost of each activity in the user manual work package.

Shown in the last column of the table in the answer for question 1.

 Calculate a contingency reserve equal to 10% of the estimated cost of the deliverables: design, development, and implementation. For the quality assurance and training, estimate 3% of the estimate as the contingency reserve. Calculations shown in the following table:

	Deliverable	Cost	Contingency Reserve		
ID	Description		Percent	Value	
1.1.	Design	\$ 2.600,00	10%	\$ 260,00	
1.2.	Development	\$ 11.400,00	10%	\$ 1.140,00	
1.3.	Quality assurance	\$ 2.400,00	3%	\$ 72,00	
1.4.	Training	\$ 10.500,00	3%	\$ 315,00	
1.5.	Implementation	\$ 14.100,00	10%	\$ 1.410,00	
		\$ 41.000,00	Total Reserve	\$ 3.197,00	

4. Calculate the management reserve as 5% of the total cost estimate for the project.

### Calculations shown in the following table:

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Concept	Value
Initial estimate	\$ 41.000,00
Contingency Reserve	\$ 3.197,00
Baseline	\$ 44.197,00
Management Reserve	\$ 2.209,85
Budget	\$ 46.406,85

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- Calculate the cost baseline (only the total amount, not the distribution over time since there is no schedule in the project information).
  Shown in the table for the answer to question 4.
- Calculate the total project budget. Shown in the table for the answer to question 4.
- Website Design Project \$ 2,860.00 Design Development \$ 12,540.00 **Quality Assurance** \$ 2,472.00 Training \$ 10,815.00 Implementation \$ 15,510.00 **Management Reserve** \$2,209.85 **Cost Baseline** \$44,197.00 **Total Project Budget** \$46,406.85
- 7. Fill in the following chart with the corresponding costs.