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Bachelor's thesis

Developing an HTML5 mobile application for Barcelona School of Informatics' Intranet

Project management: **Project budget**

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1. Considerations

In order to carry out this project the resources stated in the previous delivery will be needed, but all of them have a price. In this document, an estimation of the cost of this project is presented taking into account respective hardware and software resources amortizations.

2. Budget monitoring

In order to control the budget, at the end of each sprint the budget will be updated with the effective total amount of hours. Hence, the final budget will be a completely real budget based on real times. Specially, at the end of the second and eighth sprints the total amount of hours can widely vary. Furthermore, we must be aware of the project scheduling to see if finally iPhone and Android store packages are provided, as this will change the hardware and software budgets.

3. Human resources budget

This project is going to be developed only by one person. Hence, this person will need to be both a project manager and a software developer engineer, as well as a software developer engineer in test. Thus, we will need to difference between each role in the total of 640 hours. In Table 1, an estimation of the cost is provided.

Role	Estimated hours	Estimated price per hour	Total estimated cost
Project Manager	50 hours	50 €/hour	2.500,00 €
Software Developer Engineer	450 hours	35 €/hour	15.750,00 €
Software Developer Engineer in Test	140 hours	30 €/hour	4.200,00 €
Total estimated	640 hours		22.450,00 €

Table 1: Human resources budget

4. Hardware budget

In order to be able to design, implement and test all applications functionalities, a set of hardware will be needed for different purposes. In Table 2, an estimation of the cost of that hardware is provided taking into account their useful life, as well as their amortizations.

Product	Price	Units	Useful life	Total estimated amortization
Asus VivoBook S400CA	685,00 €	1	5 years	68,50 €
MacBook Pro ¹	1.229,00 €	1	5 years	122,90 €
Nokia Lumia 925	599,00 €	1	3 years	99,83 €
Microsoft Surface	489,00 €	1	4 years	61,13 €
Apple iPhone 5 ¹	669,00 €	1	3 years	111,50 €
Apple iPad 3 ¹	499,00 €	1	4 years	62,38 €
Google Nexus 4 ¹	299,00 €	1	3 years	49,83 €
Google Nexus 10 ¹	399,00 €	1	4 years	49,88 €
Total estimated	4.868,00 €			625,94 €

Table 2: Hardware budget

5. Software budget

Additionally, some software products will be needed to carry out the project. Although some of them are available for free as this is an academic project, the real cost is considered. As in the hardware budget, their amortizations have been taken into account. In Table 3 the software budget is shown.

Product	Price	Units	Useful life	Total estimated amortization
Visual Studio 2012 Professional	615,00 €	1	4 years	76,88 €
XCode ¹	0,00 €	1	N/A	0,00 €
ADT ¹	0,00 €	1	N/A	0,00 €
Sublime Text	53,45 € (70\$)	1	4 years	6,68 €
Windows Phone SDK	0,00 €	1	N/A	0,00 €
iPhone SDK ¹	0,00 €	1	N/A	0,00 €
Android SDK ¹	0,00 €	1	N/A	0,00 €
Adobe Photoshop	24,59 €/month	1	6 months	147,54 €
Adobe Illustrator	24,59 €/month	1	6 months	147,54 €
Microsoft Office 365 Home Premium	9,99 €/month	1	6 months	59,94 €
Windows 8 Professional	69,99 €	1	3 years	Included on Asus VivoBook
Total estimated	1.023,47 €			438,58 €

Table 3: Software budget

¹ Only necessary if finally iPhone and Android store packages can be provided.

6. Other licenses budget

Finally, other licenses will be needed in order to carry out the project. For instance, a repository will be necessary for saving the code securely (and saving different versions), as well as a test server for the test API. Furthermore, in order to develop for some platforms a developer license is needed, as shown in Table 4.

Product	Price	Units	Useful life	Total estimated amortization
GitHub premium service (private repositories)	6,10 € (7,99\$)/month	1	6 months	36,60 €
Windows Phone Developer License	75,68 € (99\$)/year	1	1 year	37,84 €
Apple Developer License ¹	75,68 € (99\$)/year	1	1 year	37,84 €
Total estimated	224,56 €/year			112,28 €

Table 4: Other licenses budget

7. Total budget

By adding all the budgets provided above, we can get the total estimated budget for this project, as shown in Table 5.

Concept	Estimated cost
Hardware	625,94 €
Software	438,58 €
Other licenses	112,28 €
Human resources	22.450,00 €
Total estimated cost	23.626,80 €

Table 5: Total budget

