

SiQuoia

(Simple Intelligence Quotient Increasing Application)

Cost Estimations

Version 2

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Team SQ03

CMPE 131-03/CS 160-02

Computer Engineering/Computer Science

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Revision History

Date	Description	Author	Comment
9.19.2013	Version 1	SQ03	
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Document Approval

Signature	Printed Name	Title	Date

1. Introduction

This document presents the estimated cost of the discovering, designing and implementing SiQuoia (Simple Intelligence Quotient Increasing Application) as defined by the Software Requirements Specifications set out by our team.

2. Project Description

SiQuoia is the software as defined by the System Requirements Specification document to be designed, developed, tested, and delivered to SiQuoia Inc. The client has been provided with the System Requirements Specification document, however the document is accessible via our github repository: <https://github.com/tinrap/SiQuoia>.

SiQuoia will provide end-users an interface to create their own personal user account, participate in quizzes, submit new questions for quizzes, and make transactions with a form of in-game currency.

3. Scope

This document will provide SiQuoia Inc. an estimate of cost to deliver the SiQuoia software solution as outlined in the Software Requirements Specification document.

The project will consist of 5 stages. The cost analysis for the entire project is broken up into these stages and itemized during each stage. The stages are as follows:

1. Requirement Gathering
2. Requirement Analysis
3. Design
4. Implementation
5. Testing
6. Utility

4. Assumptions

- If more meeting with the client occur, the cost of the cost of the meetings will be added.
- Costs involving labor are estimated using rough overestimates for the amount of hours work.
- Assuming the client is satisfied with the SRS, the project will incur no delay.
- Costs are estimated based on current hardware involved in the project. This is subject to change if additional hardware is required.
- Electricity costs include costs for all laptops, devices, and servers used.

5. Itemized Cost Estimation

5.1 Requirement Gathering

Item	Number of Hours	Cost Per Hour	Total Cost
First Interview with Client	0.25	\$110	\$27.50
Second Interview with Client	0.25	\$110	\$27.50
Total			\$55.00

5.2 Requirement Analysis

Item	Number of Hours	Cost per hour	Total Cost
High Level Analysis	12	\$300	\$3600
SRS Creation	3	\$260	\$780
Total			\$ 4380

5.3 Design

Item	Number of Hours	Cost per hour	Total Cost
Database Design	10	\$300	\$ 3000
Database PHP Design	5	\$300	\$ 1500
GUI Design	5	\$300	\$ 1500
Android Design	15	\$300	\$ 4500
Project Design Documentation	15	\$100	\$1500
Question Generation	5	\$50	\$250
Total			\$ 12250

5.4 Implementation

Item	Number of Hours	Cost per hour	Total Cost
Implement Database	10	\$50	\$500
Implement Apache Web Server	10	\$50	\$500
Implement PHP scripts	10	\$50	\$500
Implement GUI Layouts	10	\$100	\$1000
Implement Android functions	80	\$50	\$4000
API & Development related documents	10	\$100	\$1000
Graphic & Logo Design	5	\$50	\$250
Loading Question	5	\$50	\$250
Total			\$ 8000

5.5 Testing

Item	Number of Hours	Cost Per Member per hour	Total Cost
DataBase Testing	4	\$50	\$200
PHP Script Testing	10	\$80	\$800
Hardware Device Testing	15	\$100	\$1500
Testing Documentation	5	\$100	\$500
Total			\$ 2400

5.6 Hardware Costs for 4 Months

Item	Item Quantity	Price of each Item	Total Cost during project
LG Nexus 4	2	\$200	\$130
Asus Nexus 7	1	\$200	\$67
Motorola Droid Razr	1	\$200	\$67
Samsung Galaxy Tab 7.7	1	\$300	\$100
Sony Vaio	1	\$400	\$130
Dell XPS	1	\$500	\$165
Lenovo Thinkpad	1	\$300	\$80
Apple Macbook	1	\$2000	\$500
Acer Timeline	1	\$500	\$165

Total	\$1426
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5.7 Utility Cost for 4 Months

Item	Cost	Total Cost
Internet	\$100 per Month	\$400
Electricity	\$100 per Month	\$400
Amazon RDS + EC2	\$5.60 per Month	\$22

Total	\$822
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5.8 Total Cost

Stage	Cost
Requirements Gathering	\$ 55
Requirements Analysis	\$ 4380
Design	\$ 12250
Implementation	\$ 8000
Testing	\$ 2400
Hardware	\$ 1426
Utility	\$ 822
Grand Total	\$ 29333