

# **SiQuoia**

(Simple Intelligence Quotient Increasing Application)

**Cost Estimations**  
Version 1  
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Team SQ03

**CMPE 131-03/CS 160-02**  
**Computer Engineering/Computer Science**  
**Software Engineering**  
**San Jose State University**

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## Revision History

Date	Description	Author	Comment

## Document Approval

Signature	Printed Name	Title	Date

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# 1. Introduction

This document estimates the 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

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SiQuoia is the software as defined by the System Requirements Specification document to be designed, developed, tested, and delivered to SiQuoia Inc.

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

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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. Maintenance

## 4. Assumptions

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- Should more requirement gathering meeting with the client be required the cost of the requirement gathering section will increase.
- Costs involving labor are estimated using rough overestimates for the amount of hours work.
- Assuming the client is satisfied with the SRS no delay in project will incur.
- Costs involving hardware are estimated with the assumption that no other hardware may be required, charging only for the time the hardware is used for the project, and hardware failures that might occur during the project.
- Electricity costs include costs for all laptops, devices and servers used.
- Hourly Rates for following positions:  
Business Manager:\$60  
Project Manager: \$60  
Development Manager: \$50  
Risk Manager: \$40  
Test Manager: \$40

## 5. Itemized Cost Estimation

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### 5.1 Requirement Gathering

Item	Number of Hours	Cost Per Member per hour	Total Cost
First Interview with Client	0.25	\$110	\$27.50
Second Interview with Client	0.25	\$110	\$27.50

<b>Total</b>	<b>\$55</b>
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## 5.2 Requirement Analysis

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

<b>Total</b>	<b>\$ 4380</b>
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## 5.3 Design

Item	Number of Hours	Cost per hour	Total Cost
Database Design	5	\$300	\$ 1500
Database PHP Design	3	\$300	\$ 900
GUI Design	5	\$300	\$ 1500

Backend Android Design	5	\$300	\$ 1500
Project Design Docume ntation	3	\$300	\$900

<b>Total</b>	\$ 6300		
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## 5.4 Implementation

Item	Number of Hours	Cost per hour	Total Cost
Imple ment Databas e	3	\$50	\$150

Implement PHP scripts	3	\$50	\$150
Implement GUI Layouts	5	\$100	\$500
Implement Android functions	5	\$50	\$250
API & Development related documents	2	\$100	\$200

<b>Total</b>	\$1250
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## 5.5 Testing

Item	Number of Hours	Cost Per Member per hour	Total Cost
DataBase Testing	2	\$40	\$80
PHP Script Testing	2	\$80	\$160
Hardware Device Testing	5	\$80	\$400
Testing Documentation	2	\$80	\$160

<b>Total</b>	\$ 800
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## 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
Apache Server	1	\$600	\$200
Sony Vaio	1	\$400	\$130
Dell XPS	1	\$500	\$165
Lenovo Thinkpad	2	\$300	\$166
<b>Total</b>			<b>\$1025</b>

## 5.7 Maintenance Cost for 4 Months

Item	Cost	Total Cost
Internet	\$60 per Month	\$240
Electricity	\$60 per Month	\$240
<b>Total</b>		<b>\$480</b>

## 5.8 Total Cost

<b>Stage</b>	<b>Cost</b>
Requirement Gathering	\$55
Requirement Analysis	\$4380
Design	\$6300
Implementation	\$1250
Testing	\$800
Hardware	\$1025
Maintenance	\$480
<b>Grand Total</b>	<b>\$14290</b>