CS160 - SiQuoia Cost Estimates

Version 2

Team Q06

November 20, 2013

Project Team

Names	Roles
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Joe Lee	Business Manager
Swapna Vemparala	Project Manager
Shivalik Narad	Development Manager 1
Nam Phan	Development Manager 2
Amber Wong	Risk Manager
Ryan Alcoran	Test Manager

Project Team

Date	Reasons for change	Version
09/14/2013	Initial creation	v1
11/20/2013	Update cost estimates.	v2

1.   Introduction

1.1.   Purpose

The cost estimation document contains detailed estimates of the costs incurred for implementing SiQuoia based on the requirements specified by the client. It is intended for all stakeholders of the SiQuoia system.

1.2.   Scope

This document provides a projected cost analysis of the SiQuoia quiz system. It includes the assumptions made by the project team, with regard to the costs, as well as a breakdown of the costs for various components of the system.

2.   Assumptions

- Members of the project team will use their own computers (laptops or desktops) to develop and access SiQuoia.

- All project team members are responsible for their own access to the Internet throughout the duration of the SiQuoia project.

- The project team will be using the following tools, all of which are free software: OpenProj for project management, Eclipse and Emacs as IDEs and editors, Git for software configuration management, GitHub as a Git host, and codeBeamer as a bug tracker.

- Preparation for the project (requirements gathering) began in September 2013.

- The estimated period for the contract is October 2013 to December 2013.

- The duration of the proejct begins during preparation and culminates when the contract period expires.

- The cost of labor is estimated on a $10.00 per hour basis, the minimum wage for the city of San José, California.

- All team members will be involved with the design and development of SiQuoia.

- Testing and refactoring will account for at least 70% of the development process.

- The Implementation and Testing phases will occur simultaneously.

3.   Cost Estimations

3.1.   Direct Costs

Direct Costs			
Number	**Item Type**	**Cost Estimation**	**Explanation**
Phase I: Planning			
D01	Select software tools	$50.00	Chose tools to be used in developing SiQuoia
D02	Select programming language	$50.00	Java language, chosen according to the technical skill set of team members
D03	Team training	$50.00	Time spent in learning to use unfamiliar tools
D04	Tools presentation	$50.00	Presenting the selected tools to the client for input
D05	Initial cost estimation	$50.00	Draft estimated cost of project for the client
D06	Management	$100.00	This includes the cost incurred for SeQuoia management
D07	Team meetings	$30.00	Includes the costs for team meetings
D08	Client meetings	$20.00	Meetings between client and project team between 8/22-9/20
Planning Total:		**$400.00**	

Direct Costs			
Number	**Item Type**	**Cost Estimation**	**Explanation**
Phase II: Requirements Analysis			
D09	Analyze RFP	$30.00	Gathering requirements
D10	Client interviews	$30.00	Gathering requirements
D11	Draft initial SRS	$300.00	Document requirements and development plan in SRS using IEEE 830-1998 guideline
D12	Finalize SRS	$150.00	Final version of SRS
D13	Design database	$50.00	Design database based on requirements as listed in the SRS
D14	Mockup homepage	$50.00	Create mockup of SiQuoia splash-screen/homepage
D15	Determine quiz topics	$40.00	Choose subjects, topics, and subtopics for quiz question
D16	Create questions	$100.00	Gather at least 125 questions per subtopic for quiz packets
D17	Re-analyze requirements	$80.00	Analyze new requirements, as voted on by the class
D18	Management	$200.00	This includes the cost incurred for SeQuoia management
D19	Team meetings	$50.00	Includes the costs for team meetings. Based on each employee's average value of $10/hr, which met for one hour.
D20	Client meetings	$40.00	Meetings between client and project team between 9/20-9/30
Requirements Analysis Total:		**$1,120.00**	

Direct Costs			
Number	**Item Type**	**Cost Estimation**	**Explanation**
Phase III: Design			

Direct Costs			
Number	**Item Type**	**Cost Estimation**	**Explanation**
Phase IV: Implementation			
D39	Develop code	$4,000.00	
D40		$512.00	
D41	Code review	$512.00	
D42	Management	$512.00	
D43	Team meetings	$200.00	
D44	Client meetings	$40.00	
Implementation Total:		$5,776.00	

Direct Costs			
Number	**Item Type**	**Cost Estimation**	**Explanation**
Phase V: Testing			
D45	Test plan	$500.00	Create a test plan
D46	Test development	$750.00	Create test cases

		Indirect Costs	
Number	**Item Type**	**Cost Estimation**	**Explanation**
I01	General and administrative	$600.00	This includes the salaries for the management, HR, finance, and legal departments
I02	Software	$256.00	This includes the costs of software that must be installed in order to carry out the project
I03	Equipment	$40.00	Used computer purchased for use as server.
I04	Rent	$156.25	This includes the rent the team members need to pay for the workplace. For this project, the team members will work online at home or in classrooms on San José State University campus. Time at home spent on project is approximately 30 minutes per day, or 1/48th of the total time spent living there. Average rent for SiQuoia's five employees is $500/month, which three months spent on the project. 5*(1/48)*(500)*3
I09	Insurance	$1,000.00	This includes the total Insurance cost for SiQuoia
I10	Taxes	$1,800.00	This includes the taxes incurred for SiQuoia

Total Indirect Cost:	$3,852.25	

Overall Total Cost:	$18,438.25	