IdeaStorm Software Design Document

Table of Contents

1 Introduction 2

1.1 Goals and Objectives 2

1.2 Statement of Scope 2

1.3 Software Context 2

1.4 Major Constraints 2

2 Data Design 2

3 Architectural and Component Level Design 2

4 User Interface Design 2

5 Security 2

6 Restriction, Limitations and Constraints 2

7 Testing Issues 2

8 Design Process 2

9 Conclusion 2

10 Requirements Traceability 2

11 References 2

# Introduction

## Goals and Objectives

## Statement of Scope

## Software Context

## Major Constraints

TBD – Need to figure out if this section will be needed or if all constraints will be covered in the section about constraints.

# Data Design

TBD – Need to cover the file structure, how files are saved and the classes used for this.

# Architectural and Component Level Design

TBD – Need to provide a good overview of the app structure, major components (drawing engine and gallery) and explain how these components communicate with each other. I also need to cover the MVC pattern briefly (reference apple material for this) and how it is being used in IdeaStorm.

# User Interface Design

TBD – I maybe able to reference the user interface mockups in the SRS for this.

# Security

TBD – This is simple, there is no security other then what Apple provides on its devices.

# Restriction, Limitations and Constraints

TBD – Explain the platforms and OS versions that it will be limited to. Also explain what the software cannot do (load previous drawings, rearrange drawings).

# Testing Issues

TBD – Explain the testing process for IdeaStorm (Manual Test Scripts) and the test scripts that were developed.

# Design Process

TBD – Explain the process of designing IdeaStorm including this rewrite.

# Conclusion

TBD – Explain each of the below sections using bullet points

## What Worked Well

## Challenges

## Lessons Learned

# Requirements Traceability

TBD – Need to separate these by the requirement type and the major part of the software they belong to (drawing engine or gallery).

# References

TBD – Add Pressman reference in this section.

Bullock, B. (2009, September 30). Approximate length of a cubic bezier curve. *LeMoDa.net*. Retrieved September 13, 2011, from http://www.lemoda.net/maths/bezier-length/index.html

Chung, C., & Bucanek, J. (2011). *Pro Objective-C design patterns for iOS*. New York: Friends of ED/Apress.

Drawing a curve in OpenGLES - how? - GameDev.net. (2009, May 7). *GameDev.net*. Retrieved August 26, 2011, from http://www.gamedev.net/topic/534082-drawing-a-curve-in-opengles---how/

Harmon, T. (2009, October 12). Resize a UIImage the right way ‚Trevor’s Bike Shed. *Trevor's Bike Shed*. Retrieved Febuary 22, 2012, from http://vocaro.com/trevor/blog/2009/10/12/resize-a-uiimage-the-right-way/

iPhone - GLPaint Save Image - Stack Overflow. (2009, December 22). *Stack Overflow*. Retrieved April 22, 2012, from http://stackoverflow.com/questions/946700/glpaint-save-image

Lamarche, J. (2010, November 2). iPhone Development: OpenGL ES 2.0 for iOS, Chapter 4 - Introducing the Programmable Pipeline. *iPhone Development*. Retrieved August 12, 2011, from http://iphonedevelopment.blogspot.com/2010/11/opengl-es-20-for-ios-chapter-4.html

Lazuka, K. (2009, November 19). Life Kid / Point Sprites and OpenGL ES 2.0. *Life Kid*. Retrieved September 13, 2011, from http://klazuka.tumblr.com/post/249698151/point-sprites-and-opengl-es-2-0

McCaughey, D. (2010, September 30). Able Pear Software: Creating a GUID or UUID in Objective-C. *Able Pear Software*. Retrieved March 11, 2012, from http://blog.ablepear.com/2010/09/creating-guid-or-uuid-in-objective-c.html

Pinto, A. (2009, August 1). The Generic UWF Maintenence Process - SHort Version. *Generic Analysis Report Standard*. Retrieved August 28, 2011, from www.cs.uwf.edu/~seadmin/GumpShort/anastan.htm

Smooth line connecting CGPoints. (2010, May 13). Developer Forums. Retrieved May 5, 2011, from https://devforum.apple.com/message/41732?start=0&start=0

Wenderlich, R. (2010, September 7). How To Save Your App Data With NSCoding and NSFileManager | Ray Wenderlich. *Ray Wenderlich | Tutorials for iPhone / iOS Developers and Gamers*. Retrieved March 7, 2012, from http://www.raywenderlich.com/1914/how-to-save-your-app-data-with-nscoding-and-nsfilemanager