IdeaStorm Software Design Document

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# 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.

TBD – Move the explanation and diagram from 3.2.3 of the old document to here and reword to explain better.

TBD – Add an ERD diagram to show the structure and relationship of the data.

TBD – May also want to consider adding a sequence diagram to show how data is saved.

# 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.

TBD – Move the JSD describing the Gallery’s design here from section 3.1 of the old document. The explanation that goes along with the diagram would need to move here as well.

TBD – Create a JSD describing the Drawing engine

TBD – Create a class diagram showing all the class relationships

TBD – Create a sequence diagram that describes drawing

TBD – Describe the overall structure (using separate viewcontrollers with a centralized database)

TBD – FIGURE OUT AN OVERALL STRUCTURE FOR THIS SECTION

TBD – Pull the algorithms from the old document into here with the pseudocode

TBD – Need a table or some other way to describe the classes in detail that is much more compact and organized then the old method.

# User Interface Design

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

TBD – Pull (or reference) the UI mockups from the SRS

TBD – Create storyboards were and if needed to describe the rest of the UI.

# 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).

## Drawing Engine Requirements

### External Interface Requirements

|  |  |
| --- | --- |
| Requirement | Document(s), section(s) and/or process(es) that meets the requirement |
| EIR005 |  |
| EIR018 |  |
| EIR001 |  |
| EIR002 |  |
| EIR012 |  |
| EIR022 |  |
| EIR025 |  |
| EIR019 |  |
| EIR011 |  |
| EIR021 |  |
| EIR028 |  |
| EIR026 |  |
| EIR027 |  |
| EIR029 |  |

### Functional Requirements

|  |  |
| --- | --- |
| Requirement | Document(s), section(s) and/or process(es) that meets the requirement |
| FR001 |  |
| FR002 |  |
| FR003 |  |
| FR013 |  |
| FR033 |  |
| FR032 |  |
| FR004 |  |
| FR005 |  |
| FR017 |  |
| FR020 |  |
| FR023 |  |
| FR021 |  |

### Performance Requirements

|  |  |
| --- | --- |
| Requirement | Document(s), section(s) and/or process(es) that meets the requirement |
| PR001 |  |
| PR002 |  |
| PR005 |  |

## Gallery Requirements

### External Interface Requirements

|  |  |
| --- | --- |
| Requirement | Document(s), section(s) and/or process(es) that meets the requirement |
| EIR044 |  |
| EIR038 |  |
| EIR039 |  |
| EIR030 |  |
| EIR031 |  |
| EIR032 |  |
| EIR033 |  |
| EIR034 |  |
| EIR035 |  |
| EIR036 |  |
| EIR037 |  |
| EIR041 |  |
| EIR045 |  |
| EIR047 |  |

### Functional Requirements

|  |  |
| --- | --- |
| Requirement | Document(s), section(s) and/or process(es) that meets the requirement |
| FR041 |  |
| FR035 |  |
| FR042 |  |
| FR036 |  |
| FR037 |  |
| FR014 |  |
| FR038 |  |
| FR040 |  |

### Performance Requirements

|  |  |
| --- | --- |
| Requirement | Document(s), section(s) and/or process(es) that meets the requirement |
| PR006 |  |

# References

TBD – Add Pressman reference in this section.

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