Draw It or Lose It

# Software Design Template

Version 1.0

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## Document Revision History

| Version | Date | Author | Comments |
| --- | --- | --- | --- |
| 1.0 | 04/13/2021 | Rudy Flores | Analyzed and evaluated the various platforms for hosting the web based application. |
| 1.1 | 04/25/2021 | Rudy Flores | Added the recommendations to the project. |

Instructions: Fill in all bracketed information on page one (the cover page), in the Document Revision History table, in the footer, and below each header. Under each header, remove the bracketed prompt and write your own paragraph response covering the indicated information.

## Executive Summary

*The Gaming Room want to expand their gaming app Draw It or Lose It to reach a larger audience. Draw It or Lost it must*

## Requirements

*Application must be web-based and be used on traditional operating systems (Linux, Max, and Windows) as well as mobile platforms (Android, iOS, etc).*

## Design Constraints

*Application must run on multiple platforms.*

*Application must be web based.*

## Rationale

*I’ve identified the following Constraints as these are the main request from The Gaming Room. The client wants to widen their audience and being able to be cross platform is the best way to do it. Making the application web based ensures it can be run on multiple platforms.*

## Evaluation

*Server Side*

*On the server side not, all operating systems are optimal for hosting a server for our application. The more completely used operating systems are Windows and Linux. With Windows the client must pay for the licensing of the software as well as the machine that will run the server. Linux is a free operating system; however, the client must still pay for the machine that will host the server; additionally, there must be software programmer that is able to program in Linux.*

*Client Side*

*After determining the sever operating system there are licensing cost, salaries, and wages. We must also ensure that application is able to run on all web browsers.*

*Development tools*

*Programming languages used for this project are C++ and Java. A software developer familiar with both languages would be idle. Since this is a company licensing costs for an IDE would be needed.*

## Recommendations

### Operating platform

A cloud based operating platform is recommended. Cloud based operating platform for this project offers the ability to let many people play the game at a time. The provider for the cloud server can be scale up or down based on what the needs for the game are currently. This would decrease a lot of the costs caused by hardware and maintenance as all of that is handled by the cloud provider.

### Operating Systems Architectures

Using a cloud-based operating system that runs on Linux would be idle. Linux offers a lot of flexibility when hosting a server. It is reliable and can help reduce costs. Equipment wise Linux would be similar price tag to windows; however, in the software side Linux is a lot cheaper.

### Distributed Systems and Networks

The Gaming Room would like the game to be cross platform. Each operating system would be interacting with a cloud-based app. The interface that the user would be interacting with would send requests to the server and the server would response accordingly to each request.

### Security

All user data would be encrypted and stored server side.