

# Software Design Description

Doner

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# 1 Introduction

This document presents the architecture and detailed design for the software for the Doner project. This project performs functions that allows users to create visual novels without programming knowledge and allow them to view changes instantly.

## 1.1 System Objectives

The objective of this application is to provide a game engine that serves solely for visual novels. It will provide a frame of visual novel and allows users to insert and edit texts, images and audios for it. This project will save what's been changed, and a export function is provided for the user to get their own game.

## 1.2 Hardware, Software, and Human Interfaces Section

### 1.2.1 Hardware Interfaces

This project requires the user to have a computer, a monitor, and both a mouse or a keyboard. Downloading this program requires internet connection, but using this program does not.

### 1.2.2 Software Interfaces

This project runs on the basis of Windows32 system, it requires OpenGL, c++ compiler, and directX 11.

### 1.2.3 Human Interfaces

This project includes input from keyboard, and can be controlled with either a mouse or a touchpad.

## 2 Architectural Design Section

This application will have two part, the engine part and the game part. By creating a project, this application will create a program that could run as a visual novel game. The user will use the engine to modify a file that saves settings and data, and the game could read the data file to perform the game the user created.

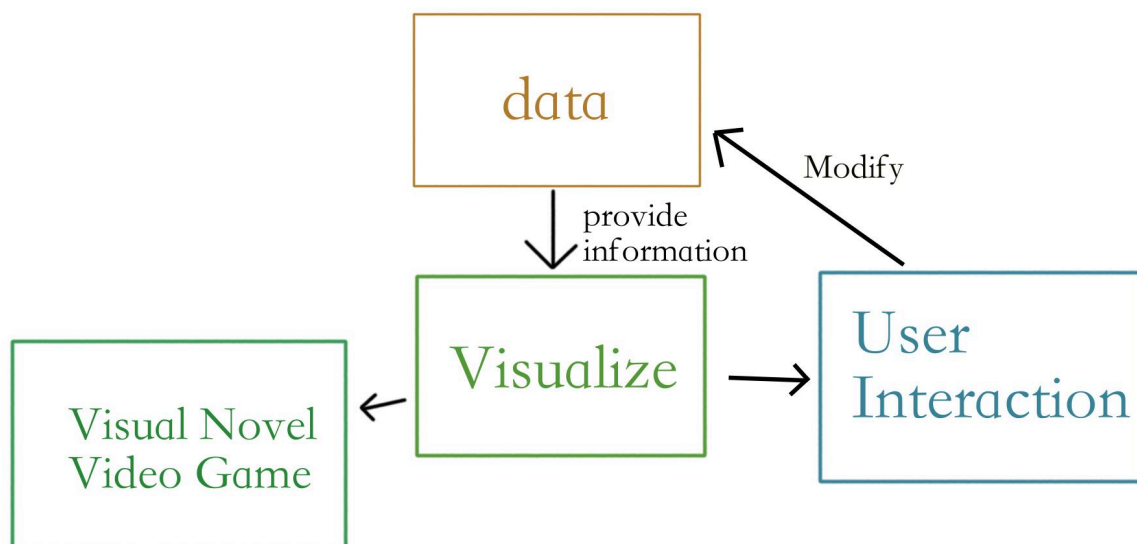
### 2.1 Major Software Components Section

This application should have the ability to read and write into files, as presenting their contents in the window. This application should also accept user's input on editing files.

### 2.2 Major Software Interactions Section

In this application, the function about file, including reading, writing and storing data, should be in one segment. It should pass the data it reads to the modification segment, as these functions are presented to the user with the visualizing section which collaborate with ImGui. On the other hand, the data that's being read could also be accepted by the section that presented the data in the form of game.

### 2.3 Architectural Design Diagrams Sections



Component Diagram



### **3 CSC and CSU Descriptions Section**

3.1 Detailed Class Descriptions section

3.2 Detailed Interface Descriptions Section

3.3 Detailed Data Structure Descriptions Section

3.4 Detailed Design Diagrams Section

## **4 Database Design and Description Section**