

# **Software Requirements Specification**

**For**

**“Yanni Draws” Website**

**Prepared by**

**Adrian Miguel Custodio**

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## **1. Introduction**

### **1.1 Purpose**

The purpose of the project is to provide a platform for the client to upload and store their art pieces on a website for potential customers to see. This doubles as an online portfolio for the client to show to the customers and stakeholders. The client may also include their contact info and other related projects in the website’s pages.

### **1.2 Intended Audience**

The audience consists of any user interested in the client’s art. This includes people who would like to contact the client (the artist) for commissions, freelance work, or hiring.

### **1.3 Intended Use**

Access to the SRS and the program is limited to the developers and the client (the artist). The developer shall be able to change details of the program, whether it be as small as a button color change or a larger scale of adding a new page. These changes must abide by the client’s requests. As for the client, their main use for the site is to be able to log into the admin system to access the upload button to upload their artworks to the gallery.

## 1.4 Scope

The main objective for the product is to create a hub of everything related to the client's interests, which in this case, is their art.

The website shall provide the capability for the client to:

1. Log in to get admin privileges such as the submission button
2. Upload their art pieces for the internet
3. Use the gallery and site as a portfolio
4. View art pieces in the gallery
5. Update users on their commission prices, upcoming projects, etc.
6. Upload their contact info

The website shall allow site visitors to:

1. View the site and art gallery
2. Create an account
3. Log in the account
4. View other information about the artist such as commission prices, upcoming projects, etc.

The product shall mainly benefit the client as it showcases their art pieces and advertises them to the public. Other than the client, the users who visit the site (commissioners, stakeholders, etc.) can see all these art pieces organized.

This website has an overall goal to create and sell the brand of the client to potential investors of their product (art).

The following are the potential risks that could occur in the deployment of the product:

- Image corruption - image(s) would not load; were not uploaded properly
  - Risk reduction: Personal image backup on a local drive
  - Person(s) involved: Developers, Client
- Broken Links - links do not lead to the desired page or worse, do not work at all
  - Risk reduction: Checking every link before website deployment; Client provides an updated and accurate link to foreign websites (contact info, etc.)
  - Person(s) involved: Developers, Client
- Unauthorized access to the submission page (not developer/client) - users other than the permitted gain access to the submission page
  - Risk reduction: Change admin credentials; do not share details to anyone but the client/developers

- Person(s) involved: Developers, Client
- Page would not load
  - Risk reduction: check domain, front end, and backend of the website before deployment
  - Person(s) involved: Developers

## **1.5 Definitions and Acronyms**

### **HTML - HyperText Markup Language**

HTML is the set of markup symbols or codes inserted into a file intended for display on the Internet. The markup tells web browsers how to display a web page's words and images. (Hayes, 2020)

### **CSS - Cascading Style Sheets**

CSS describes how HTML elements are to be displayed on screen, paper, or in other media (w3schools, n.d.)

JavaScript - JavaScript is a client-side scripting language, which means the source code is processed by the client's web browser rather than on the web server. (TechTerms.com, 2014)

Django - Django is a high-level Python web framework. In this SRS it is used as the back-end of the website being created. (django project, 2005)

### **SQL - Structured Query Language**

standard language for accessing and manipulating databases (W3schools, n.d.)

SQLite - in-process library that implements the SQL database engine. (SQLite.org, n.d.)

### **HTTP -HyperText Transfer Protocol**

Protocol for fetching HTML documents in between the server and client (MDN Web Docs, n.d.)

### **DDoS Attack - Distributed Denial-of-Service (DDoS) Attack**

a cybercrime in which the attacker floods a server with internet traffic to prevent users from accessing connected online services and sites. (fortinet, n.d.)

## **2. Overall Description**

### **2.1 User Needs**

Users of the product are the following:

- Client/Website owner (Artist)
  - The site owner which in this case, is the artist, will be the primary user of the product as they are authorized access to the submission button and is the one mainly responsible in uploading the art pieces into the gallery
- Website visitor
  - The visitors on the site can range from an internet passerby interested in looking at the client's artworks to potential customers. They can view the uploaded artworks and access the content the artist provides.

### **2.2 Assumptions and Dependencies**

The developers of the product are expected and assumed to have general knowledge on front-end and back-end coding for the creation of the website. The client is not expected to have the mentioned expertise but they are assumed to have enough computer knowledge to operate the site. While English is the main language used, the site shall be easy enough to navigate that accessing the gallery (the central purpose of the site) can be done in a few clicks.

The website shall depend on the pre-existing html, css, and javascript syntax on the front-end. The back-end shall utilize django as the web framework. As per website, it shall depend on a device that can connect to the internet and have a least 800MB-1GB of disk space to access the site and load its components. (hostadvice.com, 2020)

## **3. System Features and Requirements**

### **3.1 Functional Requirements**

The software must be able to perform the following:

1. Display the site's design
2. Have clickable buttons that users can interact with
3. Have a register and login system for users
4. Store the information of the username and passwords of the users
5. Display the art pieces in the gallery page
6. Store the art pieces in a database

7. Allow the client (artist) to submit their art, along with its title and description, to the gallery

### **3.2 External Interface Requirements**

#### **3.2.1. User Interfaces**

1. A user can perform all the available (unauthorized) tasks on the website such as click on links and view the gallery
2. The site owner/client or system admin shall be able to perform authorized tasks such as submit art pieces and add pages, along with the aforementioned tasks
3. The website shall use english as the default language
4. The website shall have plain colors the do not distract the users' eyes from the art pieces in the gallery
5. The submission button shall only appear for those with admin rights and hidden from the visitors of the site

#### **3.2.2. Hardware Interfaces**

- Any device that wishes to access the website needs to be connected to the internet in order to view it

#### **3.2.3. Software Interfaces**

- The website shall run on any device browser with at least 1.9 GHz x86 - x64 bit dual core processor and 2 GB Ram (Microsoft, n.d.)
- The website shall use SQLite, which is the built in database management system in Django, to store the art, text, and user credentials
- The following are the data to be passed to the database from the site:
  - Log-in/Sign-up credentials
  - Artwork saved as a digital image file
  - Text (Artwork title and description)

#### **3.2.4. Communications Interfaces**

- The website's online approach shall be operating with HTTP (HyperText Transfer Protocol)
- The website's offline approach shall be operating on the installed localhost from django

### **3.3 System Features**

The product, being a website, contains the following features and their functional requirements:

#### **3.3.1 Image Gallery Storage**

This feature's main purpose is to store the artist's artworks to display onto the site. It is a main priority feature as this is where the website is centered upon. It shall also double a portfolio of the artist for stakeholders to view.

The gallery shall provide a database for the images to be stored. Along with images, it shall also contain the data of the artworks' title and description. The page shall provide to the administrators of the site (Artist/Client or Developers) the ability to access the submission page through the button that only the admins can see.

#### **3.3.2 User System Access**

This system shall allow users to sign-up/log on to the site. While the main purpose is to allow the artist to upload their artworks on any device, it can also double as a user system if ever a feedback system would be implemented. Visitors can also view the website without the need to log in. As of its current purpose, it is a secondary priority.

The user system shall provide a page and interface for the site visitor to create an account and log in with said account. It shall also provide an input box for the entry of the username and password. A database is to be provided to store these credentials. The password system can identify whether the password has: at least 8 characters, containing at least 1 capital letter, 1 number, and 1 symbol. The system shall automatically log out any inactive user after 5 minutes.

### **3.4 Nonfunctional Requirements**

#### **Performance**

Due to the product being a website and not needing a huge amount of requirements to display its contents, it shall perform expectedly well on the majority of the devices. The speed would be quick enough (estimated 2-5 seconds) for the web page to load.

#### **Safety**

Data taken from users would be treated with utmost confidentiality and respect. This applies to any of the personal username and passwords imputed into the log-in/signup system. No other data is required to be imputed from the user.

#### **Security**

While the website is of a smaller scale, there still is a possibility for attacks such as DDOS attacks. The developers must take the precautions and steps to protect the website from such attacks. Steps like increasing the server bandwidth to handle traffic spikes can be used and implemented into the system (Geerts, 2021).

#### Quality

The quality of the product shall be presentable to the visitors of the site. It shall have a user interface that is friendly even to those who are not well versed with technology. It shall have a polish of texts being in a uniform format (fonts, colors, etc.) and are in their proper text boxes. Images should also be formatted to not cover each other and other parts of the site.

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