# Online Art Gallery

SOFTWARE REQUIREMENTS SPECIFICATION DOCUMENT

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# **Revision History**

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# **Document Approval**

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# 1. Introduction

# 1.1 Purpose

This document explains the specifications and requirements of the "Art Gallery" a website. It describes the functional feature and non functional requirements of the site such as interface, design and other detailed related to Art Gallery. This specification document is intended for the entrepreneurs who are interested to open their Art Gallery and students also can read this documentation for learning purpose.

# 1.2 Scope

An **online art gallery** is a **website** that displays artworks. Usually, the **online gallery** is run as a business, with the purpose of displaying the artwork being to promote it to potential buyers. Other variations include: An **online art** market for collectors also known as an **online** secondary market.

# 1.3 Definitions, Acronyms, and Abbreviations

### 1.3.1 Web Application

A type of software that runs on some server. It is usually a piece of software that runs online.

#### **1.3.2** Apache

Software To Host The Web Locally. It Is Open Source Software.

#### **1.3.3** Mysqli

Database Management System for Managing Database. It Is Also Open Source Software.

#### **1.3.4 Xampp**

Xampp Is Combination Of Apache, php And Mysqli Database.

#### 1.3.5 Server

Server Is A Powerful System That Hosts Some Web Applications.

#### 1.3.6 Open Source

A software that is freely available in the market to download its code for research or modifications.

#### 1.3.7 Web Browser

Software to surf the web.

#### 1.3.8 Insertion

A process to insert new records in the database.

# 1.3.9 Updating

A process to update the existing records.

#### **1.3.10 Deletion**

A process to remove some record from the database.

#### 1.3.11 Selection

A process to select a data from database and to show the user.

#### 1.3.12 Admin

A user who manages the whole website at the backend. He is the most powerful user of the application. He is responsible for the whole database. He can insert, update and delete data from database.

#### 1.3.13 Client

A user who uses the application from the front end. It can send the request to the server.

#### **1.3.14 Database**

A database is the collection of related data that is stored in an efficient and compact manner. Data is stored in the form of tables in the database. Table is a collection of rows and columns.

#### 1.3.15 RAM

Random Access Memory, a type of memory. It is a temporary memory.

#### References

IEEE STD 830-1998, IEEE recommended practice for software requirement specification.

# 1.4 Overview:

The remaining SRS contains

The Overall Description

Gallery Perspective

**Gallery Functions** 

**User Characteristics** 

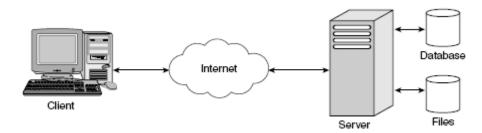
**General Constraints** 

Assumption and Dependencies

# 2. The Overall Description

#### 2.1 Event Perspective

As mentioned above, this website is totally independent and not a part of some existing system. This website needs a server i.e. web server or a local server, apache in our case. The client send request to the server, the application host on some server will communicate to the application and to the database management system if needed to facilitate the request. The database server wills responses user according to demands of the user.



#### 2.Online Art Gallery Functions

This web project is all about Art gallery, which consists of two views.

- Admin Panel
- Client Panel

Where admin is responsible for whole database. Admin can perform all the designs, creates and update operations. Admin will be able to

- May add new items in the database using the admin panel
- May update the items in the database
- May delete the items in the database

A client who will use the application from front end, it will be able to visit the website. Client will be able to select different types of paintings i.e. according to their interest. The client will be able to search different paintings with name

Art Gallery should embed the following features and function to its users, i.e. admin and client.

• Should make the admin able to login into the admin panel after authentication.

- Should make the admin able to view the entire available Gallery in the database.
- Should make the admin able to insert new paintings, new profile and new categories.
- Should make the admin able to view list all clients.
- Should make the admin able to make new admin, delete or update the existing user.
- Should make the client able to select more than one Gallery.
- Should provide the security for the system.

#### 2.3 User Characteristics

There are two types of system users. The first is user, user can login and upload his information and also check another profile. The second user is the administrative who have the capability for maintain the record. Admin manage the whole database. Admin is the person who will control the application by entering new events, by updating or deleting new events. I.e. paintings, and categories.

#### **2.4** General Constraints

Web application is based on internet which required both hardware and software, so we will facilitate the requirements about software which are given below. Web application are used the specific software that are include PHP 6.0, Apache and data Base scheme used Mysql and hardware requirements are dual core process with at least 1GB RAM for used this software. For better results better hardware will be consider a plus point.

#### 2.5 Assumptions and Dependencies

There are some number of factors that are consider to be fulfill to make the project work according to the requirements described in document.

- The mentioned system will use the latest tool available in the market, so it is assumed the user will use the latest web browser for working that is load the UI properly.
- There is huge involvement of JavaScript code so it is assumed that the user will not disable the JavaScript in the browser to run the application smoothly.
- It is assumed that the front-end user is specifically from Pakistan.
- System date corresponds to Actual date and Time
- Users of the system are technically skilled persons and they understand that how to handle this system.

# **3 SPECIFIC REQUIREMENTS**

# 3.1 Interface Requirements

#### 3.1.1 User interface

There are two types of user interface.

- (1) Client User Interface
- (2) Administrator User Interface

#### 3.1.2 Client interface

The minimal requirements are that the user would be able to communicate to the system using GUI. GUI stand for graphical User Interface.GUI is bases on HTML5, CSS3, JavaScript and different frameworks and libraries. a JS library and Bootstrap, a CSS framework. Different GUI based component are used for the following actions.

#### 3.1.3 Administrator Interface

The minimal requirements required for the administrator interface that the admin will access the control panel through a GUI using some web browser. The GUI again bases on HTML5, CSS3 and JavaScript and different libraries and frameworks. No command line utility will be given to the user to access the system. Hyperlinks and buttons will be provided to the admin to perform different tasks.

#### 3.1.3 Hardware Interfaces

Art Gallery is a Web site that is why all hardware interface of this, will be those of server On top of which it will be running. Hence the website will incorporate the server for all the hardware instances such as CPU, memory and communication.

#### 3.1.4 Software Interfaces

As our mentioned system runs on a server, so a server having the capabilities to run the scripts written in PHP language is required. Moreover the server should have the database like Mysqli in order to make the application able to make transactions with records in database.

#### 3.2 Functional Requirements

This section narrates the features and process performed by the web site. Firstly, the following features of the system and their interaction with administrator are described check paintings, Delete artist Update profiles, Update User, and Delete User. Then the following features related to User are described: Search Paintings, Registration, and feedback, they are followed by a detailed specification of the functionality of the art gallery. Data definition will also be discus in this document .Data flow diagram will be provided in these documents.

# 3.2.1 Add Artist profile

#### 3.2.1.1 Introduction

This functional feature deals with the administrator. The admin can add new painting in the database by using the interface of the Art Gallery.

#### **3.2.1.2 Inputs**

The admin will enter the Artist name, Artist address, time, date and other details about profile using different UI elements.

# 3.2.1.3 Processing

The server with communicate the Mysql to insert the new item in the database.

#### **3.2.1.4 Outputs**

A success message will be shown to the user and database will be updated.

#### 3.2.2.5 Error Handling

An error message will be shown upon some error while updating the item in the database.

### 3.2.3DeleteArtist profile

#### 3.2.3.1 Introduction

This functional feature also deals with the administrator. The admin can delete Artist in the database by using the interface of the art gallery.

#### **3.2.3.2 Inputs**

The admin will delete the item in the database with the help of ID of the artist. He would select the id of the artist from a dropdown menu.

#### 3.2.3.3 Processing

The server with communicate the Mysqli to delete the item in the database.

## **3.2.3.4 Outputs**

A success message will be shown to the user and database will be updated.

#### 3.2.3.5 Error Handling

An error message will be shown upon some error while deleting the item in the database.

#### 3.2.4MakeA New User

#### 3.2.4.1 Introduction

This functional feature too deals with the administrator. The admin can make new admin in the database by using the interface of the art gallery.

#### **3.2.4.2 Inputs**

The admin will enter the name, username, email id and password of the new admin as input.

#### 3.2.4.3 Processing

The server with communicate the Mysqli to insert the new item in the database.

#### **3.2.4.4 Outputs**

A success message will be shown to the admin and database will be updated with a new record.

#### 3.2.4.5 Error Handling

An error message will be shown upon some error while inserting the new user in the database.

#### 3.2.5Update Existing User

#### 3.2.5.1 Introduction

This functional feature also deals with the administrator. The admin can update an existing user in the database by using the interface of the Art Gallery.

#### **3.2.5.2 Inputs**

The admin would edit the user name, user address and other details about the user using different UI.

#### 3.2.5.3 Processing

The server with communicate the Mysqli to update the item in the database.

#### **3.2.5.4 Outputs**

A success message will be shown to the user and database will be updated.

# 3.2.5.5 Error Handling

An error message will be shown upon some error while updating the admin in the database.

#### 3.2.6New User Registration

#### 3.2.6.1 Introduction

This functional feature deals with the user who is using the application's front-end .He would have to register him before any detail.

#### **3.2.6.2 Inputs**

The user will enter his complete name, address, his phone number, email address to register him.

#### 3.2.6.3 Processing

The server with communicate the Mysqli to and the user will be added to the database.

#### **3.2.6.4 Outputs**

Database will be updated with a new user and a success message will.

#### 3.2.6.5 Error Handling

An error message will be shown upon some error while searching a specific item the database.

#### 3.2.7User Login:

#### 3.2.7.1 Introduction:

The user may login to artist detail by using the credentials assigned to him upon registration.

#### **3.2.7.2 Inputs**

The user will enter his email address and password to login.

#### 3.2.7.3 Processing

The application will communicate to the database to check if the user has registered already.

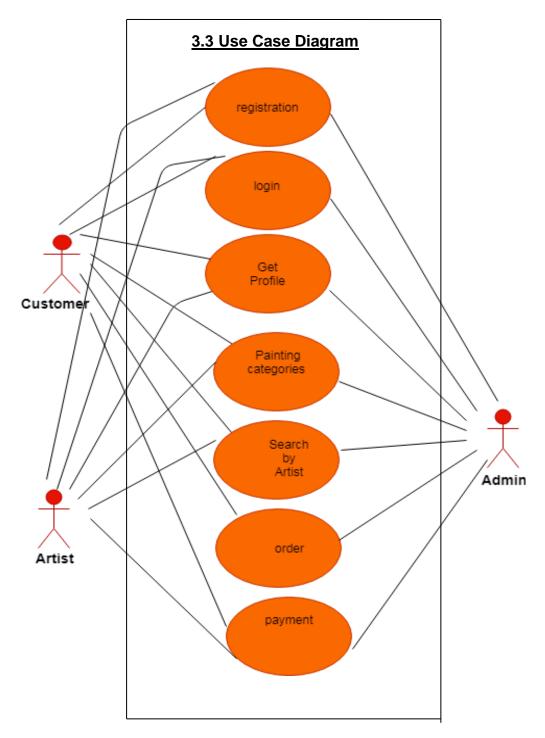
# **3.2.7.4 Outputs**

User will be logged in if the entered credentials meets the one in the database and a success message will be shown otherwise he will be asked to enter correct data.

#### 3.2.7.5 Error Handling

An error message will be shown upon some error while logging into the database.

# **Online Art Gallery**



### 3.4 Non-Functional Requirements

#### 3.4.1 Performance

- 1. Average load time of the start page of website should be less than 5 seconds.
- 2. Average response time of the system should be less than 10 seconds.
- 3. Our system should easily accessible on the system having minimum internet speed of 1MB/s

# 3.4.2 Reliability

There will be a maximum of 1 bug/KLOC.

# 3.4.3 Supportability

All code will be written as specified by the Hungarian Naming Convention.

# 3.4.4 Availability

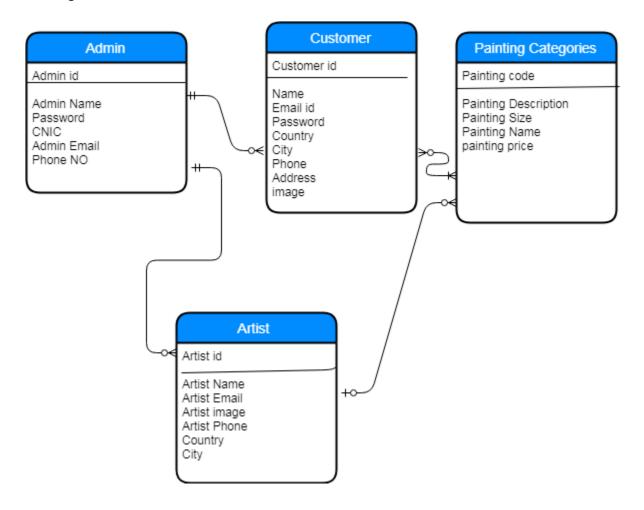
Seminar Generator will be available to client 7 days a week and 24 hours a day. In case of any system crash a backup will be available to make the system live.

# 3.4.5 Security

Users' information will be secure and he will be able to access only their own personal information.

# 3.5 Logical Database Requirements

# **ER** Diagram



# 3.6 Design Constraints

# 3.6.1 Parent component

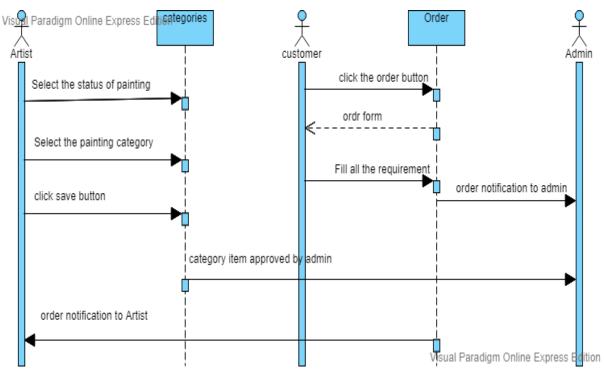
There is no parent of "Gallery". It works its own.

### 3.6.2 Application Language

Language used for this application is mainly "PHP" for server side logics and HTML.CSS and Java script for front-end side.4. Analysis Models

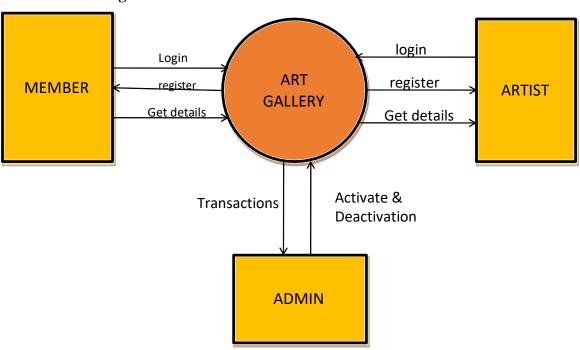
# 4. Sequence Diagrams

5.

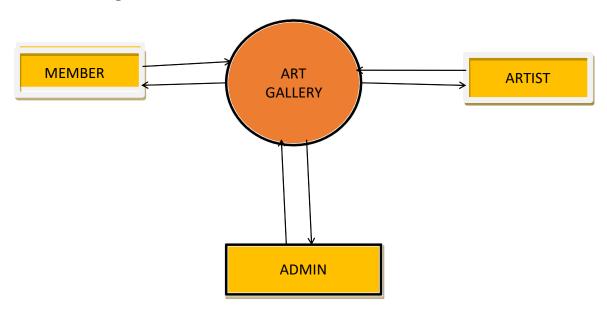


# 4.3 Data Flow Diagrams (DFD)

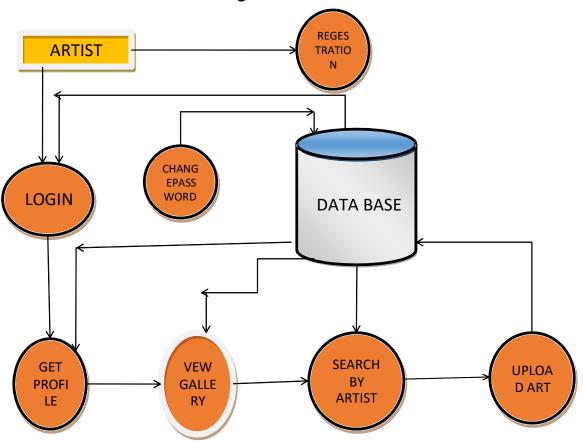
# 4.3.1Context Diagram



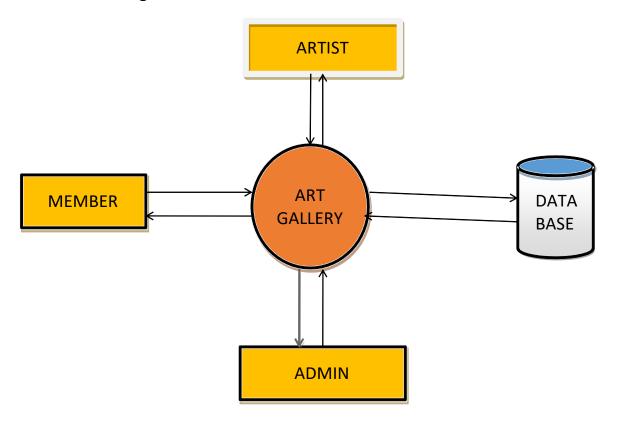
# 4.3.2level 0diagram



# 3.4.3Level 1 Artist Features Diagram



# 3.4.4Level 2 Diagrams Of Admin Features



# Appendix A

# **Glossary**

#### Actor

It represents a role, external entity that interacts with our system.

#### Use case

Graphical Represent of interaction among system and actor.

#### Scenario

The time of actual input and expected output.

### Use case diagram

Represent use the services and functionality by the system by the actor.

#### **Use case Realization**

How the use case realizes in the design table model.

# **Activity diagram**

Graphical represent of the process flow of use case etc.

### Sequence diagram

Represents the interaction of an object to perform a job.

### **Collaboration diagram**

Alternative representation of sequence diagram.

#### Data model

Represent the persistence object model.

#### Web References:

# [General]

http://www.yourhtmlsource.com/starthere/whatishtml.html

http://www.w3.org/standards/webdesign/htmlcss

 $\underline{https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Introduction}$ 

https://www.draw.io

# [Search]

http://www.google.com

http://www.37.com

http://www.registration.com

http://www.mamma.com

# **Online Art Gallery**