

# Online Art Gallery

A project submitted to

**UKA TARSADIA UNIVERSITY**

in partial fulfillment of the requirements for the degree of

**Bachelor of Science**

in

**Information Technology**

for

**5 Years Integrated M.Sc.(IT)**

By

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# CERTIFICATE

This is to certify that **Saumil Modi(201906100110001)** **Pankti Manavar(201906100110048)** has submitted project entitled **Online Art Gallery** as the partial fulfillment for the award of the degree of Bachelor of Science in Information Technology for 5 Years Integrated M.Sc.(IT) in 2020 – 2021.

**Date:**

**Place:**

**Mrs.Preeti Bhatt**

Guide

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Programme Coordinator,

**External Examiner**



**Babu Madhav Institute of Information Technology,**

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# Chapter 1:Introduction

## 1.1. Problem Definition:

Online art gallery provides artist to show their talent and promote their art. Artist can sell art from anywhere using this system. This system can showcase the history of particular culture in a visual manner. This system can shall showcase and will bring details report of all artifacts sold in the past and forthcoming. This system will be updated daily, so the user can view and buy the latest collection of contemporary art online from anywhere.

## 1.2. Initial Requirement Document

Title of the project	Online Art Gallery
Stakeholders involved in capturing requirement	Myself and project guide
Techniques used for requirement capturing	Brainstorming
Name of the person along with designation	Saumil Modi (Student), Pankti Manavar (Student) And Preeti Bhatt (Project guide)
Date	August 2021
Users of the system	Admin, Customers and Artist
Version	1.0
<b>Consolidated list of initial requirements:</b>	
Req #1	The system shall be able to run on both computer and mobile browsers.
Req #2	The system shall be able to provide unique login ID and password for all system user and verify artist account.
Req #3	All users can reset the password.
Req #4	All user can change their account details.
Req #5	All user can able to use logout functionality.

Req #6	3 type of system users:  1. Admin 2. Artist 3. Customer
Req #7	The admin shall be able to maintain the details of Artist and Customer
Req #8	The admin shall be able to view all customer details
Req #9	The admin shall be able to view/delete/update the art.
Req #10	The admin shall be able to maintain the category.
Req #11	The admin shall be able to view the record of customer's orders.
Req #12	The admin shall be able to view a feedback.
Req #13	The admin shall be able to view commission.
Req #14	The Artist shall be able to maintain the details of art.
Req #15	The Artist shall be able to view reports for orders.
Req #16	The Artist shall be able to modify some details of the customer's orders.
Req #17	The Artist shall be able to view cancel order.
Req #18	The Artist shall be able to view feedback.
Req #19	The Artist shall be able to view a profit or loss.
Req #20	The Artist shall be able to give feedback for admin.
Req #21	The Customer shall be able to view all art and their details.
Req #22	The Customer shall be able to view artist details.
Req #23	The Customer shall be able to Add art to cart.
Req #24	The Customer shall be able to manage cart for multiple arts
Req #25	The Customer shall be able to view their place order.
Req #26	The Customer shall be able to cancel their order before delivered.

Req #27	The Customer shall be able to do payment via debit/credit/case on delivery.
Req #28	The Customer shall be able to do give review for the particular art.
Req #29	<p>The system should also be able to generate report like.</p> <ul style="list-style-type: none"> <li>▪ Details of Artist</li> <li>▪ Details of customer</li> <li>▪ Details of customer order <ul style="list-style-type: none"> <li>○ Date wise.</li> <li>○ Price wise</li> <li>○ Category wise</li> </ul> </li> <li>▪ Details of art <ul style="list-style-type: none"> <li>○ Category wise</li> <li>○ Price wise</li> </ul> </li> </ul>

### 1.3. Project Objective

- This System we can maintain all details about Customer order, Customer details, artist details and art.
- To reduce the cost of business operation
- To provide easy and effective way of shopping from customer's home.
- To reduce the manual work for managing records.
- Save time and efforts for shopping
- To bring transparency and fairness.

### 1.4. Product Scope

- Admin can't add art.
- Without subscription artist can't do anything in system.
- Discounts offers are not available.
- Exchange policy is not available.
- Return policy is not available.
- Cancellation only can be made before delivery.
- This system shall be provide facility for offline delivery of the art.

## **Chapters 2: Overall Description**

### **2.1 Product Perspective/ Environment Description**

#### **2.1.1 Hardware [Interface/](#) Hardware Specification**

- **Processor:**
  - Core i3
- **RAM:**
  - 4 gb

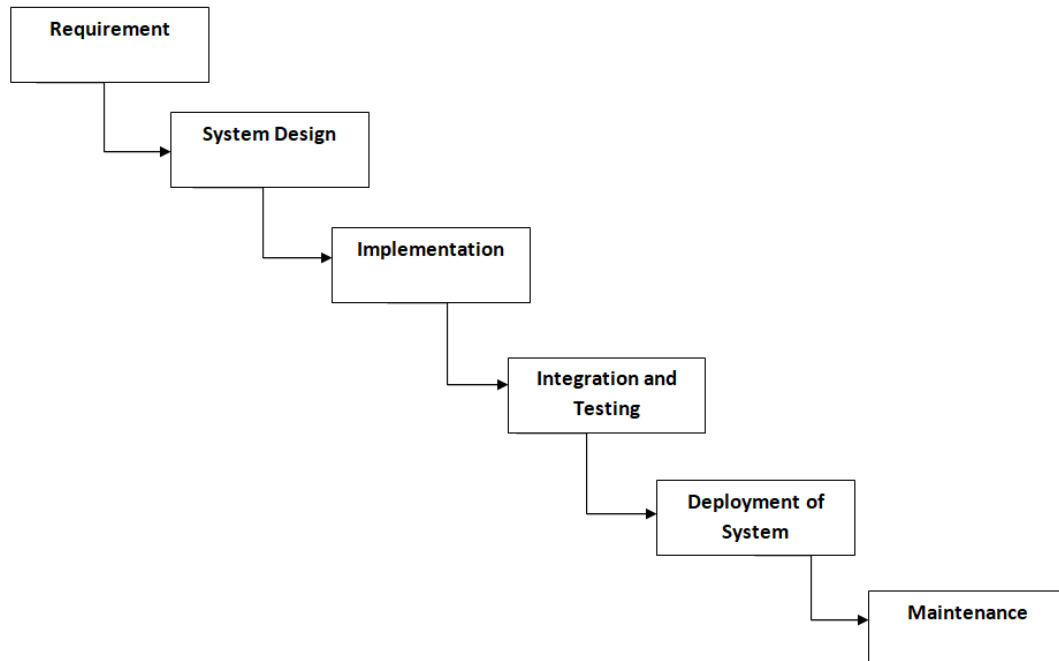
#### **2.1.2 [Software Interface/ Software](#) Specification:**

- **Operating System:**
  - Windows 10
- **Tools:**
  - Netbeans 12.0
- **Backend:**
  - MySQL Server

## Chapter 3: System Planning

### 3.1 Software Engineering Model

- Waterfall methodology is selected as the software development life cycle methodology.



### 3.2 CPM PERT



## Chapter 4: System Specific Requirements

### 4.1 Functional Requirement

#### Module1: Registration and Login

RN	Description	Comments
FR1	System shall authenticate user and after successful authentication system shall login user to the system.	Login form
FR2	<p>For artist:-</p> <p>admin will be able to register artist with the system by submitting following information.</p> <p>First Name, last name, gender, mobile number, address, country name, state name, city name, pincode, email id, password, conform password.</p> <p>For customers :-</p> <p>system shall provide an interface for customer to register themselves with the system by submitting following information.</p> <p>First Name, last name, gender, mobile number, address, country name, state name, city name, pincode, email id, password, conform password.</p>	Registration form
FR3	Enable user to change password if user forgets password. Send otp through mail for user's varification.	Login form forgot password
FR5	Enable a registered user to view his profile.	User profile

#### Module 2 : Manage Customer

RN	Description	Comments
FR1	This module will be managed by admin	Admin panel
FR2	The system will assign unique id to each customer.	Customer panel
FR3	<p>To manage this module the admin will be able to perform following operation like,</p> <ul style="list-style-type: none"><li>• view/search customer(by customer id and name)</li><li>• active/deactivate customer</li></ul>	Customer details form

### Module 3 : Manage Artist

RN	Description	Comments
FR1	This will be managed by admin	Admin panel
FR2	The system will be assign unique id to each artist.	Artist panel
FR3	Artist can join the system by buying the subsription	Admin panel
FR4	To manage this module the admin will be able to perform following operation like, <ul style="list-style-type: none"><li>• view/search artists(by artist id and name)</li><li>• active/deactivate artist</li></ul>	Artist detail form

### Module 4 : Manage Arts

RN	Description	Comments
FR1	This module will be managed by admin.	Admin panel
FR2	The system will assign unique id to each art.	Product form
FR3	In this module, admin will be able to manage,manage category	Product details form
FR4	Whenever new products arrive, the admin will be able to record the following details like, art name with it's category, price,etc.	Product details form
FR5	To manage this module artist will be able to perform following operation like, <ul style="list-style-type: none"><li>• add arts</li><li>• update arts</li><li>• view/search arts(by art's id,catagory,price)</li></ul>	Product details form

### Module 5 :- Manage Cart

RN	Description	Comments
FR1	This module will be manage by customer	Customer panel
FR2	In this module customer wil be able to manage their carts by performing following operaton, <ul style="list-style-type: none"><li>• add to cart</li><li>• view cart</li><li>• remove from cart</li></ul> from the cart, customer can place order.	Cart form

## Module 6 : Manage Order

RN	Description	Comments
FR1	This system will assign unique id on each order placed by the customer.	Order form
FR2	In this module, customer will be able to perform following operation, <ul style="list-style-type: none"><li>• place order</li><li>• view order details</li><li>• cancel order</li></ul> admin and artist will be able to view order details.	Order details form
FR3	This module shall be able to record following details like, order id, customer id, customer name, art id, art name by it's category, price.	Order details
FR4	Customer shall also be able to cancel their order before 24 hours of delivery of products	Order details form

## module 7 : Manage Payment

RN	Description	Comments
FR1	In this module, system provide an interface for customer to do payment by three option like,  credit card, debit card, cash on delivery	Payment form
FR2	The system will be able to record all the details of payment which can be view by customer, artist, admin.	View payment details form

## module 8 : Generate Report

RN	Description	Comments
FR1	This module will be managed by admin. System shall be able to generate report automatically.	Admin panel
FR2	Different types of reports will be generated by the system like,  Report of customer order <ul style="list-style-type: none"><li>➤ in this report details of customer order will be stored like name of art by it's category, price and along with the date on which customer has been placed order.</li></ul> Report of art	Report details form

	<ul style="list-style-type: none"> <li>➤ in this report all the details of product will be stored like art name by it's category..</li> <li>➤ whenever new product arrives it will also automatically stored in the records of report.</li> </ul> <p>Report of artist</p> <ul style="list-style-type: none"> <li>➤ in this report details of artist will be stored by it's unique id .</li> </ul> <p>Report of customer</p> <ul style="list-style-type: none"> <li>➤ in this report all the details of customer will be stored by customer unique id.</li> </ul>	
FR3	Admin shall also be able to active/deactivate reports	Update report details form

### module 9 : Manage Feedback

RN	Description	Comments
FR1	This module will be managed by artist and admin.	Artist/admin panel
FR2	<p>In this module customer shall be able to give feedback's about particular art.</p> <p>Customer shall be able to watch see reviews of other people.</p>	Feedback form
FR3	Artist shall be able to view all feedback's on his art and shall able to delete them and shall also give reply on feedback.	Update feedback form details
FR4	Admin shall be able to view all feedback's on art and shall able to delete them and shall also give reply on feedback.	Update feedback form details

## 4.2 Non-functional Requirement

### 1: Security

RN	Description	Comments
NFR1	The application will be password protected. The users will have to enter the correct login id and password to access the application. For security md5 algorithm will be used.	Login Form

### 2:Availability

RN	Description	Comments
NFR1	System will be available for 24*7 hours. It will access at any place.	–

### 3: Maintainability

RN	Description	Comments
NFR1	System will be able to maintain all necessary details.	Admin Panel

### 4: Reliability

RN	Description	Comments
NFR1	System will be reliable in quality and features.	–

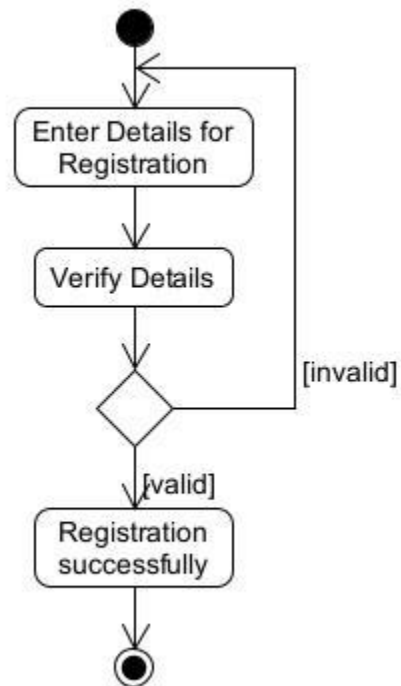
# Chapter 5: System Analysis

## 5.1 Use case Diagram

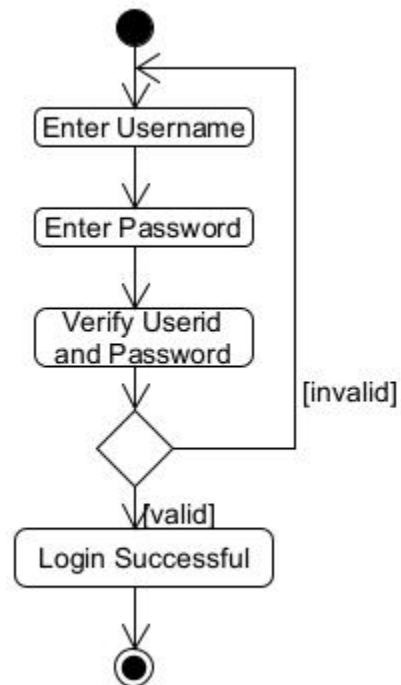


## 5.2 Activity Diagrams

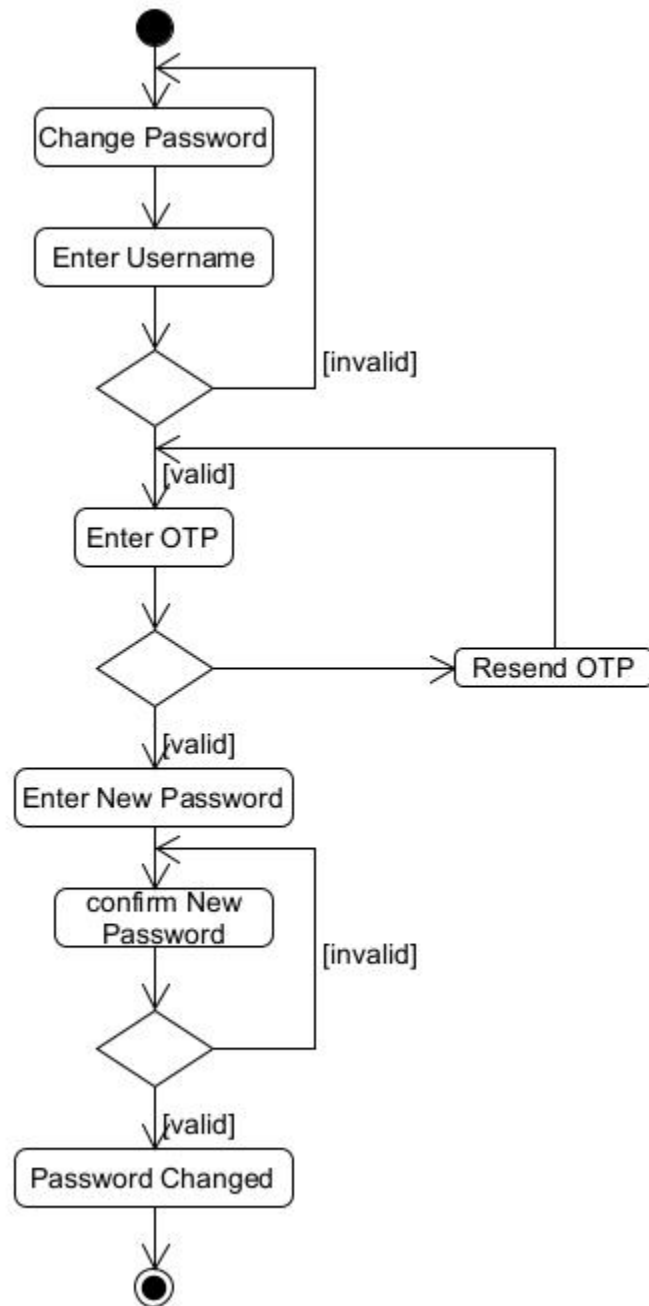
- Activity diagram for Registration



- Activity diagram for login :

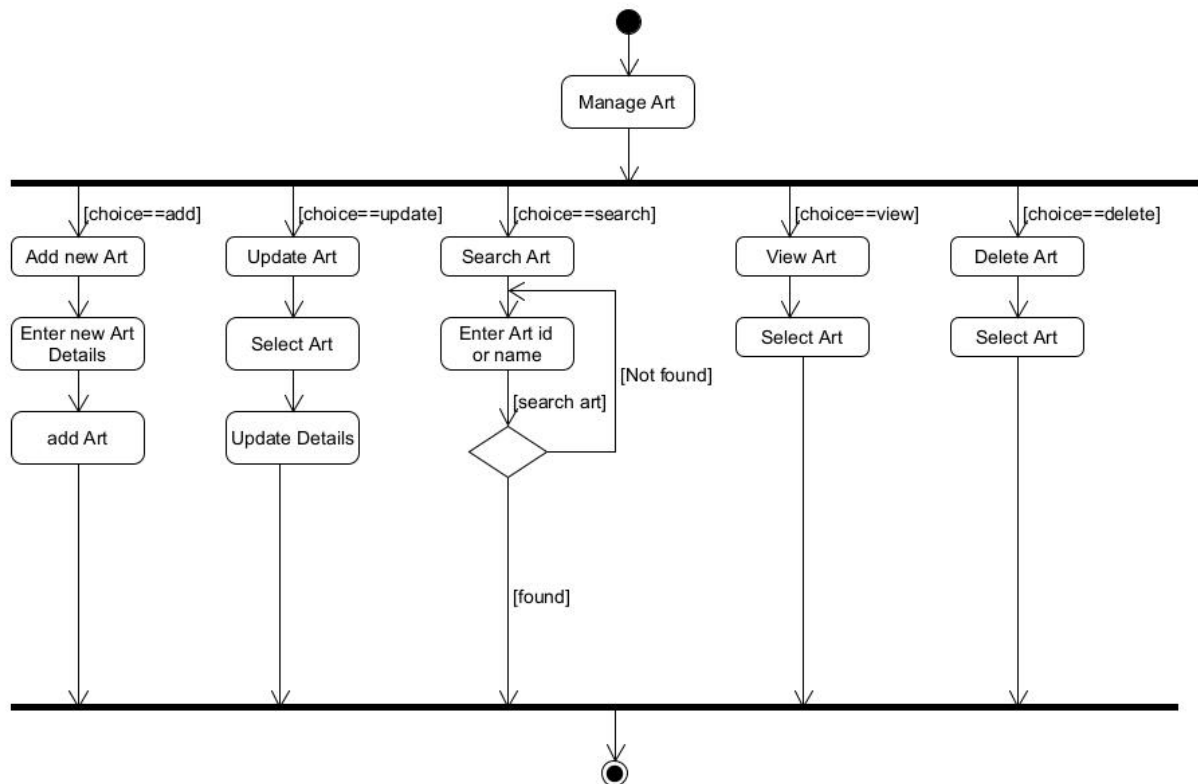


➤ Activity diagram for Changer Password:

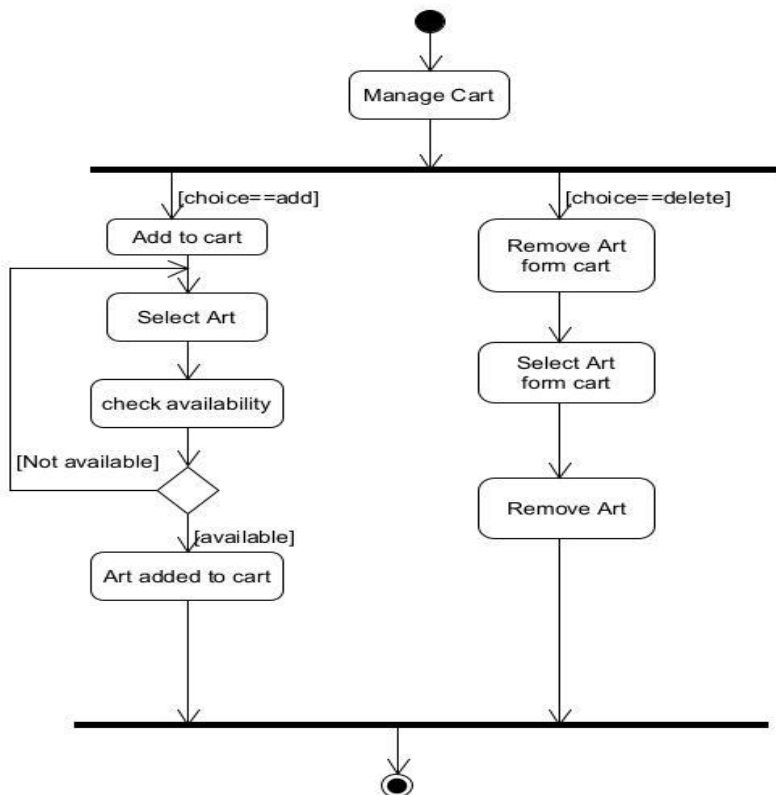




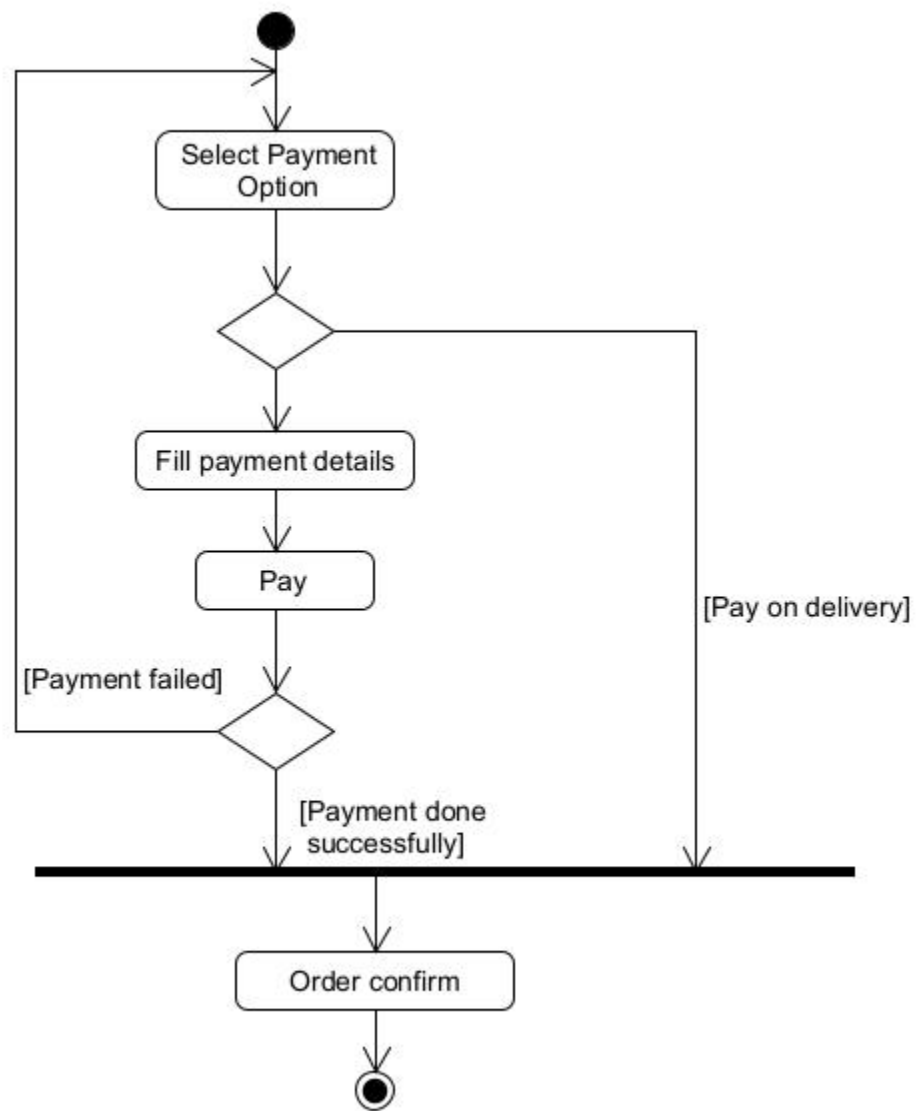
➤ Activity diagram for Manage Art:



➤ Activity diagram for Cart:



- Activity diagram for Payment:



## Chapter 6: System Design

### 6.1 Database Design

#### 6.1.1 Database Schema

##### 1. Common Tables:

- tblCountry(id, country\_name)
  - FD: id->{country\_name}
- tblState(id, state\_name, country\_id[Fk][tblCountry])
  - FD: id->{state\_name,country\_id[FK]}
- tblCity(id, city\_name, state\_id[FK][tblState])
  - FD: id->{city\_name, state\_id[Fk]}

##### 2. Manage Registration Details:

- tblRegistration(id, first\_name, last\_name, gender, mobile\_number, address, city\_id[fk][tblCity], pincode, email\_id, password, mode[artist/customer])
  - FD: id -> {First\_name, Last\_name, gender, mobile\_number[unique], address, City\_id[FK], Pincode, Email[unique], password,mode} City\_id->{state\_id[FK]} State\_id->{Country\_id[FK]}
- tblArtistDetails(id, artist\_id[fk][tblRegistration],description)
  - FD: id->{artist\_id[Fk], description } Artist\_id->{ first\_name, last\_name, gender, mobile\_number}

##### 3. Manage Art:

- tblCategory(id,category\_name)
  - FD: id->{Category\_name}
- tblArt(id, artist\_id[fk][tblRegistration], category\_id[fk][tblCategory], art\_name, image, price, art\_details)
  - FD: id->{Artist\_id[FK],category\_id[FK],Art\_name, image, price, Art\_details} Artist\_id->{Fisrtname,lastname}

##### 4. Manage Order:

- tblOrder(id, customer\_id[fk][tblRegistration], order\_date, delivery\_date, amount, mode\_of\_payment, status)
  - FD: id->{Customer\_id[FK], order\_date, amount, mode\_of\_payment, status}
- tblOrderItem(id, oder\_id[FK][tblOrder], art\_id[fk][tblArt],price)
  - FD: id->{Order\_id[FK], Art\_id[FK], price } Art\_id->{Art\_name, image, art\_details}

##### 5. Manage Cart:

- tblCart(id, customer\_id[fk][tblRegistration], art\_id[fk][tblArt])
  - FD: id->{customer\_id[FK], Art\_id[Fk]}

Customer\_id->{customer\_name}

Art\_id->{ Art\_name, image, price, art\_details }

#### **6. Manage Payment:**

- tblPayment(id, customer\_id[fk][tblRegistration], order\_id[fk][tblOrder], payment\_status)
  - FD: id->{customer\_id[FK], order\_id[FK], payment\_status}
- Customer\_id->{customer\_name}

#### **7. Manage Feedback:**

- tblFeedback(id, artist\_id[fk][tblRegistration], comment)
  - FD: id->{Artist\_id[FK], comment}
- tblCustomerArtFeedback(id, customer\_id[fk][tblRegistration], art\_id[fk][tblArt], comment)
  - FD: id->{Customer\_id[FK], Art\_id[Fk], comment}
- Art\_id->{Art\_name}

## 6.1.2 Data Dictionary

### 1. Common Tables:

- Table Name: tblCountry
- This table stores the details of Country

Sr. No.	Field Name	Data Type	Size	Constraint	Description
1	Id	Integer	-	Primary Key, Auto Increment	Unique country id will be generated by the system
2	Country_name	Varchar	30	Not null	Name of the country will be stored

- Table Name: tblState
- This table stores the details of State

Sr. No.	Field Name	Data Type	Size	Constraint	Description
1	Id	Integer	-	Primary Key, Auto Increment	Unique state id will be generated by the system
2	State_name	Varchar	30	Not null	Name of the state will be stored
3	Country_id	Integer	-	Foreign Key, Not Null	It holds country id from tblCountry(id)

- Table Name: tblCity
- This table stores the details of City

Sr. No.	Field Name	Data Type	Size	Constraint	Description
1	Id	Integer	-	Primary Key, Auto Increment	Unique city id will be generated by the system
2	City_name	Varchar	30	Not null	Name of the city will be stored
3	State_id	Integer	-	Foreign Key, Not Null	It holds country id from tblCountry(id)

## 2. Manage Registration Details:

- Table Name: tblRegistration
- This table stores the details of Artist and Customer

Sr. No.	Field Name	Data Type	Size	Constraint	Description
1	Id	Integer	-	Primary Key, Auto Increment	Unique artist and customer id will be generated by the system
2	First_name	Varchar	30	Not null	Specifies the first name of the artist and customer
3	Last_name	Varchar	30	Not null	Specifies the last name of the artist and customer
4	Gender	Char	1	Not null	Specifies the gender of the artist and customer F=female,m=male,o=other
5	Mobile_no	Bigint	10	Not null, unique	Specifies the mobile number of the artist and customer
6	Address	Varchar	200	Not null	Specifies the address of the artist and customer
7	Country_id	Integer	-	Foreign Key, Not Null	It holds country id from tblCountry(id)
8	State_id	Integer	-	Foreign Key, Not Null	It holds state id from tblState(id)
9	City_id	Integer	-	Foreign Key, Not Null	It holds city id from tblCity(id)
10	Pincode	Char	6	Not null	Specifies the pincode of artist and customer
11	Email_id	Varchar	255	Not null, unique	Specifies the email of the artist and customer
12	Password	Varchar	255	Not null	Specifies the password of the artist and customer
13	Mode	Char	1	Not null	Specifies the mode of the a=artist or c=customer

- Table Name: tblArtistDetails
- This table stores the details of Artist

Sr. No.	Field Name	Data Type	Size	Constraint	Description
1	Id	Integer	-	Primary Key, Auto Increment	Unique ArtistDetails id will be generated by the system
2	Artist_id	Integer	-	Foreign Key, Not null	It holds artist id from tblRegistration(id).
3	Description	Varchar	255	Not null	Specifies the description file location

### 3. Manage Art:

- Table Name: tblCategory
- This table stores the details of Category

Sr. No.	Field Name	Data Type	Size	Constraint	Description
1	Id	Integer	-	Primary Key, Auto Increment	Unique category id will be generated by the system
2	Category_name	Varchar	30	Not null	Specifies the category names.

- Table Name: tblArt
- This table stores the details of art

Sr. No.	Field Name	Data Type	Size	Constraint	Description
1	Id	Integer	-	Primary Key, Auto Increment	Unique category id will be generated by the system
2	Artist_id	Integer	30	Foreign Key, Not Null	It holds artist id from tblRegistration(id)
3	Category_id	Integer	-	Foreign Key, Not Null	It holds category id from tblCategory(id)
4	Art_name	Varchar	30	Not null	Specifies the art name
5	Image	Varchar	255	Not null	Specifies the image location of the art

6	Price	Float	-	Not null	Specifies the art price
7	Art_details	Varchar	200	Not null	Specifies the details of art

#### 4. Manage Order:

- Table Name: tblOrder
- This table stores the details of orders

Sr. No.	Field Name	Data Type	Size	Constraint	Description
1	Id	Integer	-	Primary Key, Auto Increment	Unique order id will be generated by the system
2	Customer_id	Integer	-	Foreign Key, Not Null	It holds customer id from tblRegistration(id)
3	Art_id	Integer	-	Foreign Key, Not Null	It holds art id from tblArt(id)
4	Order_date	Date	-	Not null	Specifies the date on which order shall be placed
5	Amount	Float	30	Not null	Total amount of order will be stored
6	Mode_of_payment	char	3	Not null	Will store the customer's mode of payment either by debit card or credit card or by cash on delivery c=creditcard, d=debitcard, cod=cashondelivery

- Table Name: tblOrderItem
- This table stores the details of orders art and price

Sr. No.	Field Name	Data Type	Size	Constraint	Description
1	Id	Integer	-	Primary Key, Auto Increment	Unique cart id will be generated by the system
2	Order_id	Integer	-	Foreign Key, Not Null	It holds customer id from tblRegistration(id)



3	Art_id	Integer	-	Foreign Key, Not Null	It holds art id from tblArt(id)
4	Price	float	-	Not null	Specifies the Price of the Art

#### 5. Manage Cart:

- Table Name: tblCart
- This table stores the details of cart

Sr. No.	Field Name	Data Type	Size	Constraint	Description
1	Id	Integer	-	Primary Key, Auto Increment	Unique cart id will be generated by the system
2	Customer_id	Integer	-	Foreign Key, Not Null	It holds customer id from tblRegistration(id)
3	Art_id	Integer	-	Foreign Key, Not Null	It holds art id from tblArt(id)

#### 6. Manage Payment:

- Table Name: tblPayment
- This table stores the details of payment

Sr. No.	Field Name	Data Type	Size	Constraint	Description
1	Id	Integer	-	Primary Key, Auto Increment	Unique city id will be generated by the system
2	Customer_id	Integer	-	Foreign Key, Not Null	It holds customer id from tblRegistration(id)
3	Order_id	Integer	-	Foreign Key, Not Null	It holds order id from tblOrder (id)
4	Payment_status	Varchar	15	Not null	Specifies the status of the payment

## 7. Manage Feedback:

- Table Name: tblFeedback
- This table stores the details of artist's feedback

Sr. No.	Field Name	Data Type	Size	Constraint	Description
1	Id	Integer	-	Primary Key, Auto Increment	Unique city id will be generated by the system
2	Artist id	Integer	-	Foreign Key, Not Null	It holds artist id from tblRegistration(id)
3	Comment	Varchar	200	Not null	Specifies the feedbacks for the system given by the artist

- Table Name: tblCustomerArtFeedback
- This table stores the details of customer's feedback

Sr. No.	Field Name	Data Type	Size	Constraint	Description
1	Id	Integer	-	Primary Key, Auto Increment	Unique customer art feedback id will be generated by the system
2	Customer id	Integer	-	Foreign Key, Not Null	It holds customer id from tblRegistration(id)
3	Art id	Integer	-	Foreign Key, Not Null	It holds art id from tblArt(id)
4	Comment	Varchar	200	Not null	Specifies the feedbacks for the art given by the customer