



ART GALLERY ANALYSIS SYSTEM



MINI PROJECT REPORT

Submitted by

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in

19AD581 – NOSQL DATABASES LABORATORY

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

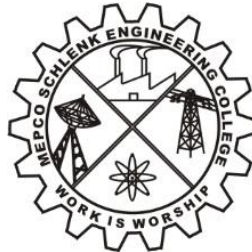
MEPCO SCHLENK ENGINEERING COLLEGE

SIVAKASI

NOV 2022

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AUTONOMOUS

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE



BONAFIDE CERTIFICATE

This is to certify that it is the bonafide work of **Aksshaya.B (Reg. No.: 202009003)** and **Bhuvana.S (Reg.No.:202009008)** for the mini project titled “**Art Gallery Analysis System**” in 19AD581 – NoSQL Databases Laboratory during the fifth semester, July 2022 – November 2022 under my supervision.

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ABSTRACT

Implementation of Art Gallery Analysis System using HTML and Angular as frontend and MongoDB and ExpressJS as backend. This project intends different types of forms with many types of art varieties and provides the ser to buy online. Online art users can give order from any place and pay. A user has to login or register. The user can select a picture that he/she needs to buy. He can add the art to his cart and in checkout, he can pay the amount for the art added.

The purpose of online art gallery is to automate the existing manual system by the help of computerized equipments and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. The required software and hardware are easily available and easy to work with.

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INTRODUCTION

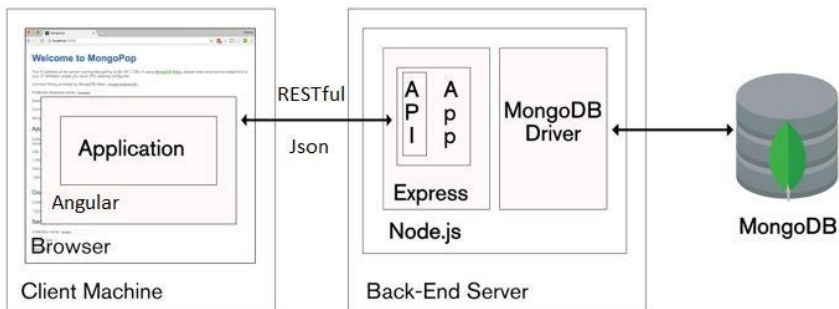
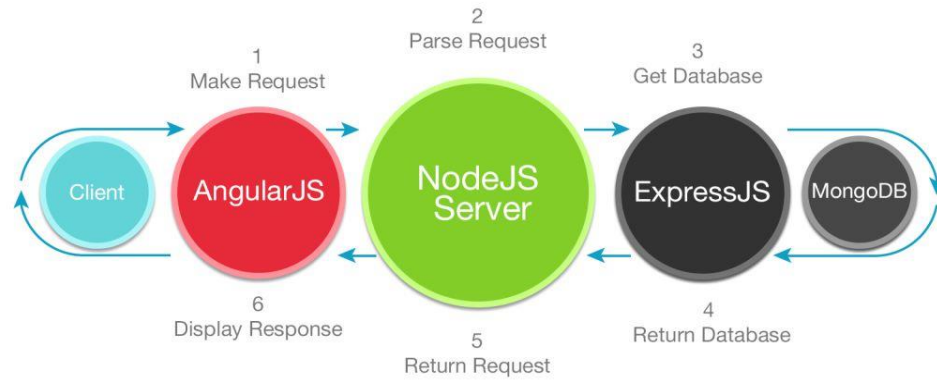
This project intends to include various features related to an art gallery i.e., information about gallery, exhibition, artists, their paintings, customers (the one who bought the paintings) etc. The main aim is to help art lovers know about different exhibition details organized by different organizations, the artwork included, the artists. People who wish to buy this artwork can very easily contact the artist. There is a login page for administrator, artists and customer. Artists can login through their account and include details about new paintings made by them. Customers can login through their account and see different paintings available for selling purpose. Administrator can include details about new art gallery, upcoming exhibition details and the exhibition artists. The basic idea of the project is to make art lovers buy products anywhere and anytime by using their login provided to them. The data base will maintain the product details information. No formal knowledge is needed for the user to use this system. By this it proves it is user-friendly. Online Art Gallery can lead to error free, secure, reliable and fast management system. Customers can view their product details in their login. This online shopping system involves with Customer, Administrator and Artist. The customer can login/logout the system. He/she can view the art works of various artists and buy their art works. The administrator plays a vital role in the Online Art Gallery system. The administrator controls the entire database. The main role of the administrator is to safeguard the database and can add/delete the products from the database. The artist adds on his/her art works in the database for the customers to buy using their login. It contains a few modules,

Login Module - In this module user can enter the application by providing username and password and start shopping.

Shopping Module – The customer can view and buy latest art works. Admin can add, modify and delete the art works. A new user will have to register in the system by providing essential details in order to view the products in the system. View Products User can view the list of products based on their names after successful login. A description of a particular product with product name, products details, product image, and price can be viewed by users. The user can add the desired product into his cart. Then he can buy the product when he desires from the cart. On buying the work the cart will become empty.

SOFTWARE TECH USED

- Frontend – HTML and Angular
- Backend – MongoDB and ExpressJS



The system has the following requirements:

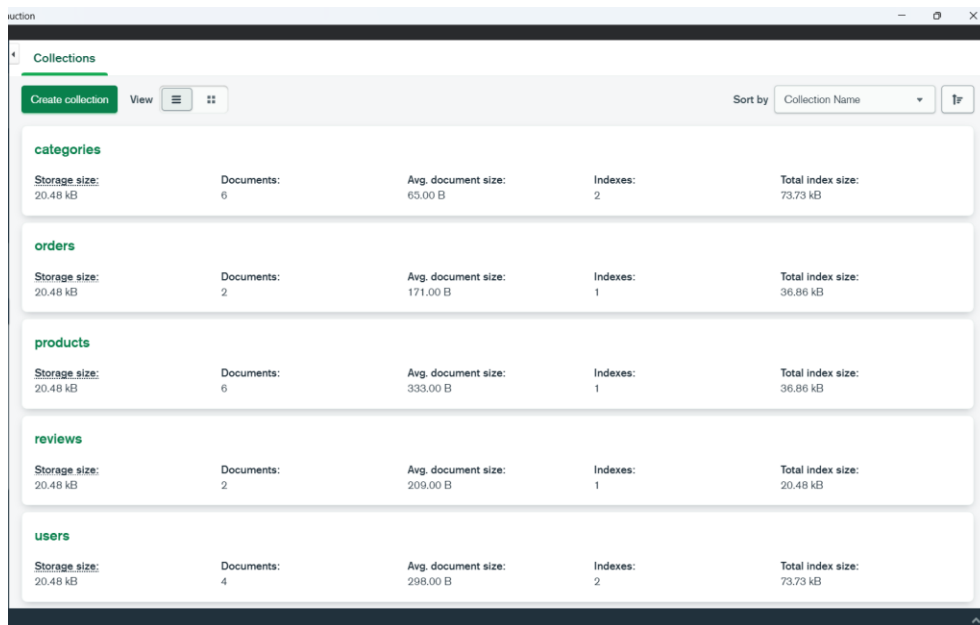
- System needs to store information about new entry of Arts.
- System need to keep the record of order update.
- System need to update and delete the record.
- System needs a search area.
- It needs a security system.

DESIGN

Database Name: art_auction

Collections:

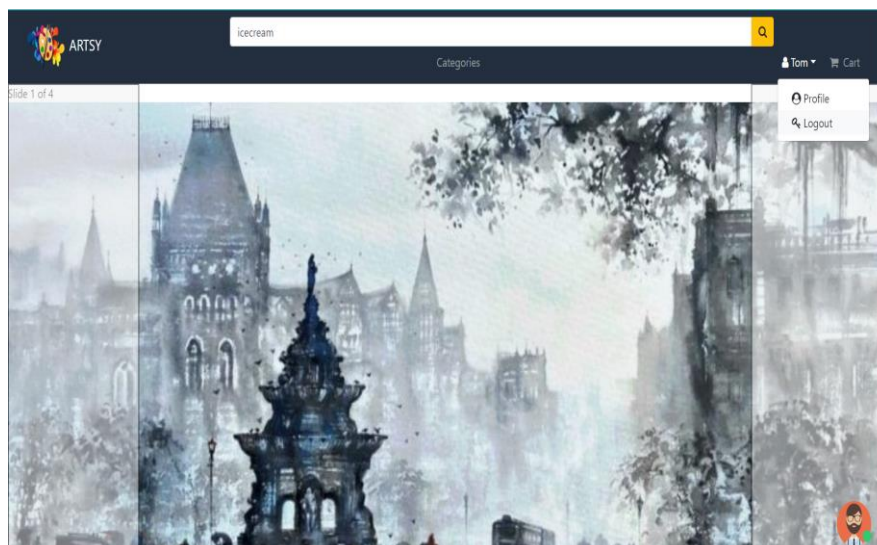
- Users
- Products
- Orders
- Reviews
- Categories



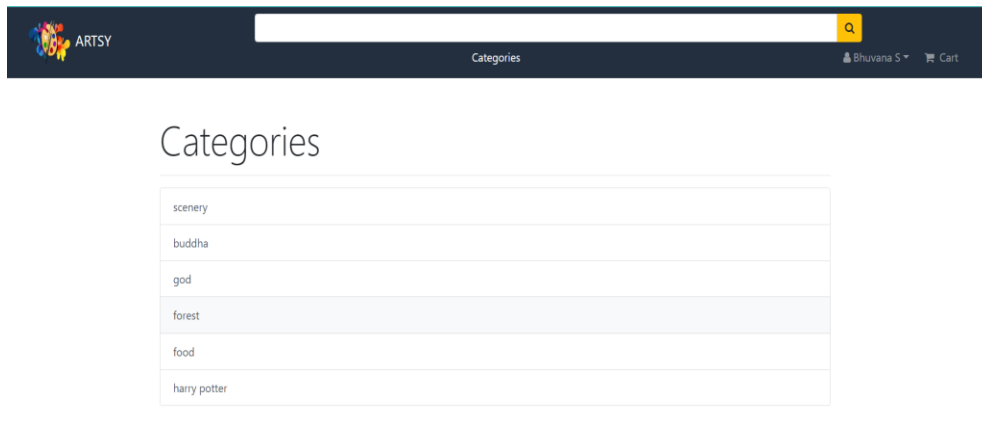
The screenshot shows the MongoDB Collections interface. At the top, there's a 'Collections' tab and a 'Create collection' button. Below this, a table lists five collections: categories, orders, products, reviews, and users. Each collection entry includes its storage size, the number of documents, the average document size, the number of indexes, and the total index size.

Collection Name	Storage size	Documents	Avg. document size	Indexes	Total index size
categories	20.48 kB	6	65.00 B	2	73.73 kB
orders	20.48 kB	2	171.00 B	1	36.86 kB
products	20.48 kB	6	333.00 B	1	36.86 kB
reviews	20.48 kB	2	209.00 B	1	20.48 kB
users	20.48 kB	4	298.00 B	2	73.73 kB

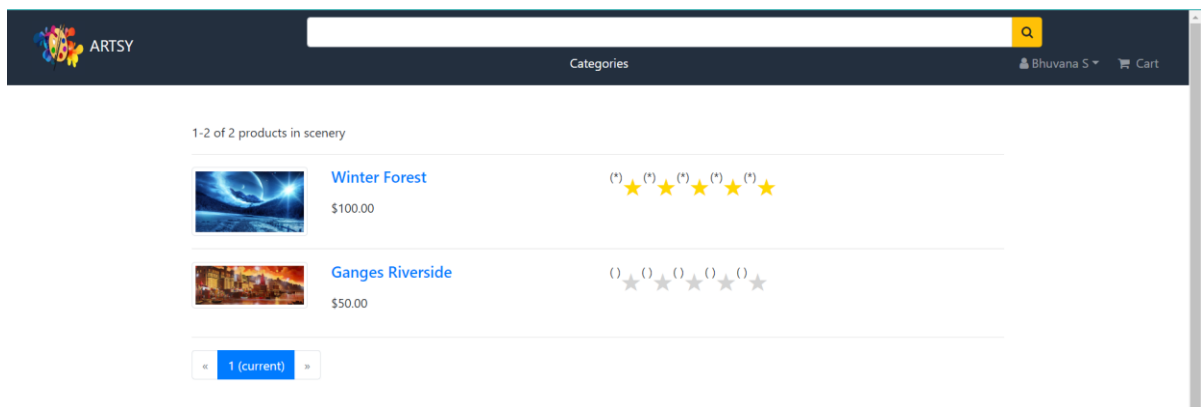
Home page:



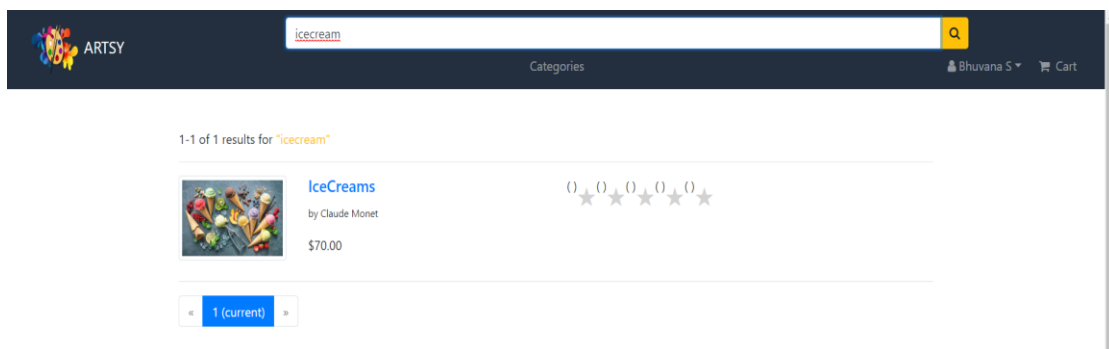
These are the various categories of art works available.



You can also give ratings for the pictures on display.



You can also search for a certain type of art for viewing or buying the same.



A picture can be posted for sale:

Post a Product for Sale

Title

Red Forest

Price

150

Category

forest

Description

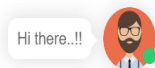
Beautiful Autumn Forest with Dazzling Red Flowers

Upload Image

Choose File

red-forest.jpg

Post



Add review to the picture you love:

Reviews

Add a review

Title

Deliciously Looking

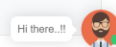
Description

[Indeed](#) a mouthwatering picture!!!

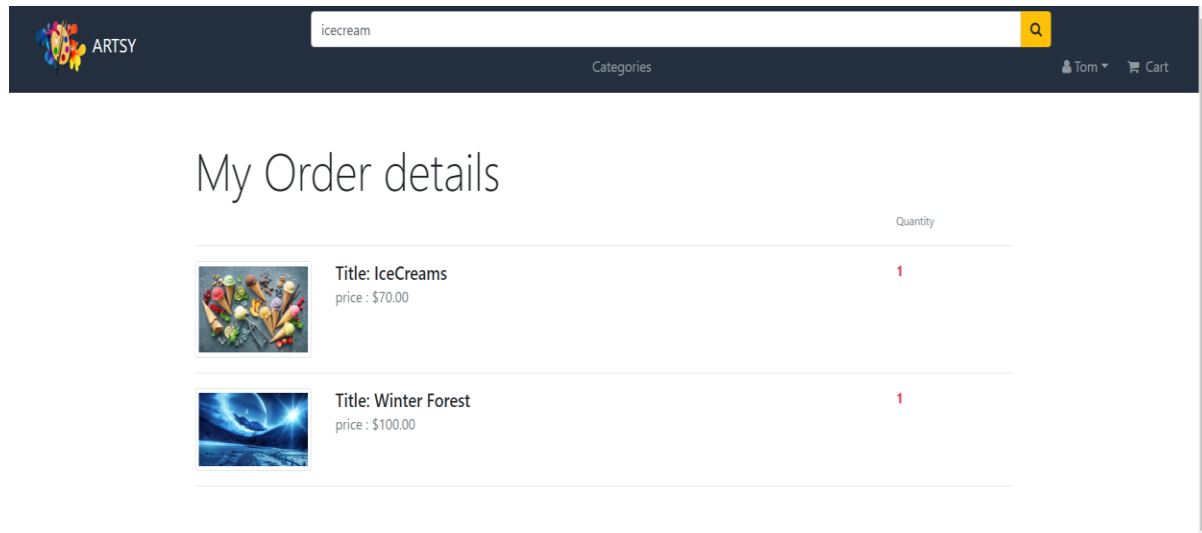
Rating

(*) ★ (*) ★ (*) ★ (*) ★

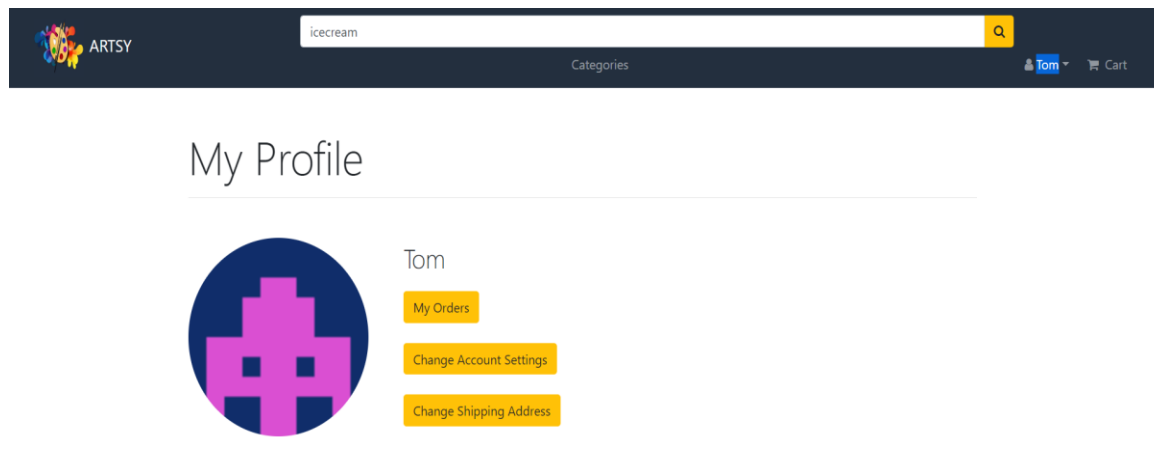
Post Review



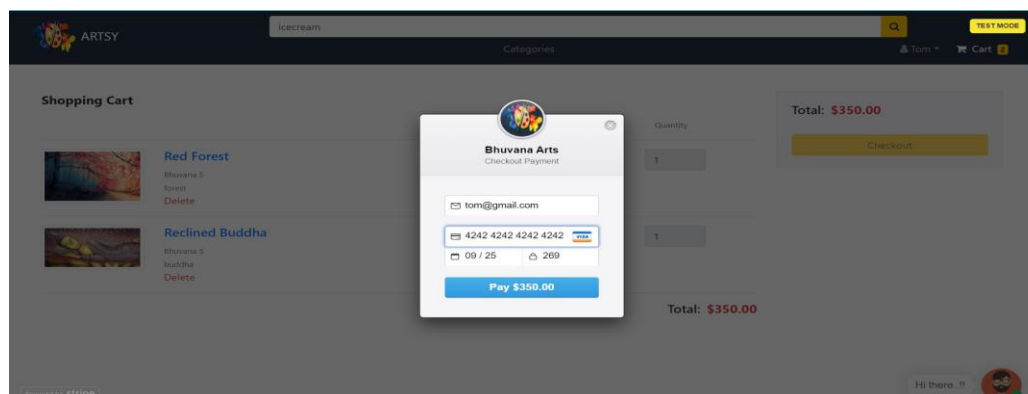
View your order details:



User profile:



Checkout for payment:



Sample Documents

//In Categories:

```
{
  _id: ObjectId('634ba007900e980a702e6cfe')
  name: "scenery"
}
```

//In Orders:

```
{
  _id: ObjectId('634ba007900e980a702e6cfe')
  totalPrice: 10000
  products: Array
    quantity: 1
    _id: ObjectId('634ba007900e980a702e6cfe')
    Product: ObjectId('634ba959900e980a702e7c2e')
  owner: ObjectId('634ba959900e980a702e7c2e')
}
```

//In reviews:

```
{
  _id: ObjectId('634ba007900e980a702e6cfe')
  rating: 5
  owner: ObjectId('634ba959900e980a702e7c2e')
  Title: "Worth for Money"
  description: "Such a beautiful picture decorated my lobby in a low cost. Gives a ple...."
}
```

//In products:

```
{
  _id: ObjectId('634ba007900e980a702e6cfe')
  reviews: Array
    0: ObjectId('634ba007900e980a702e6cfe')
    1: ObjectId('634ba986900e980a802e6cfe')
  owner: ObjectId('634ba959900e980a702e7c2e')
  category: ObjectId('634ba007900e980a702e6cfe')
  image: http://localhost:3030/images/product\_picture.jpg
  title: "Winter Forest"
  price: 100
  description: "Winter Forest Scene Picture Fantasy Design"
}
```

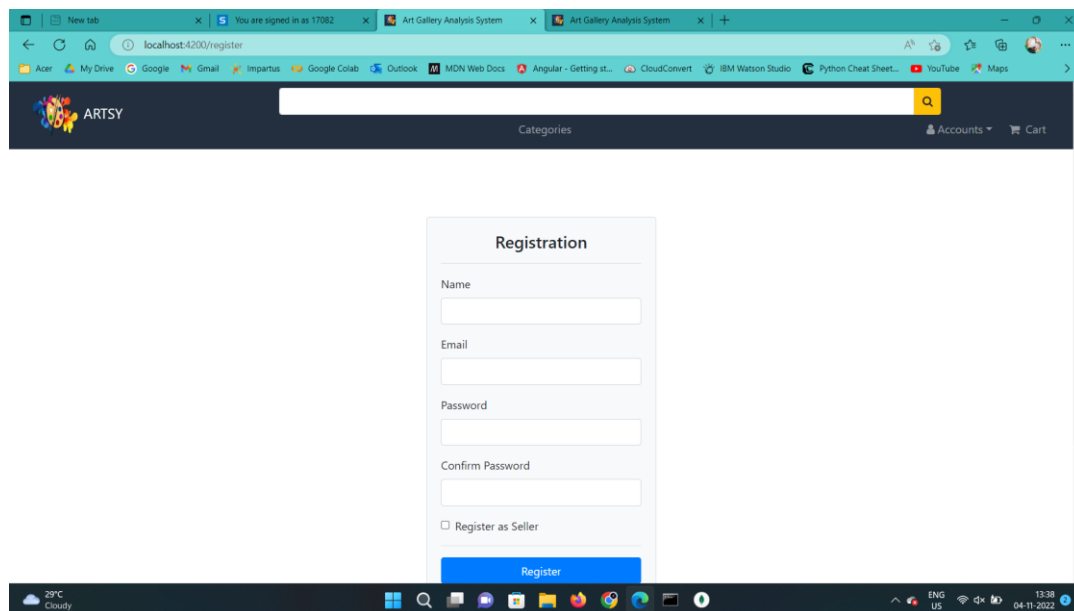
// In users:

```
{
  _id: ObjectId('634ba007900e980a702e6cfe')
```

isSeller: false
name: Tom
email: "tom@gmail.com"
password: "\$234ABCD.t3Kh2"
address: Object
 addr1: "No.6, Westside Lane"
 city: "Chennai"
 country: "India"
 postalCode: "600001"
 state: "Tamil Nadu"

SAMPLE SCREENSHOTS - CRUD

Create:



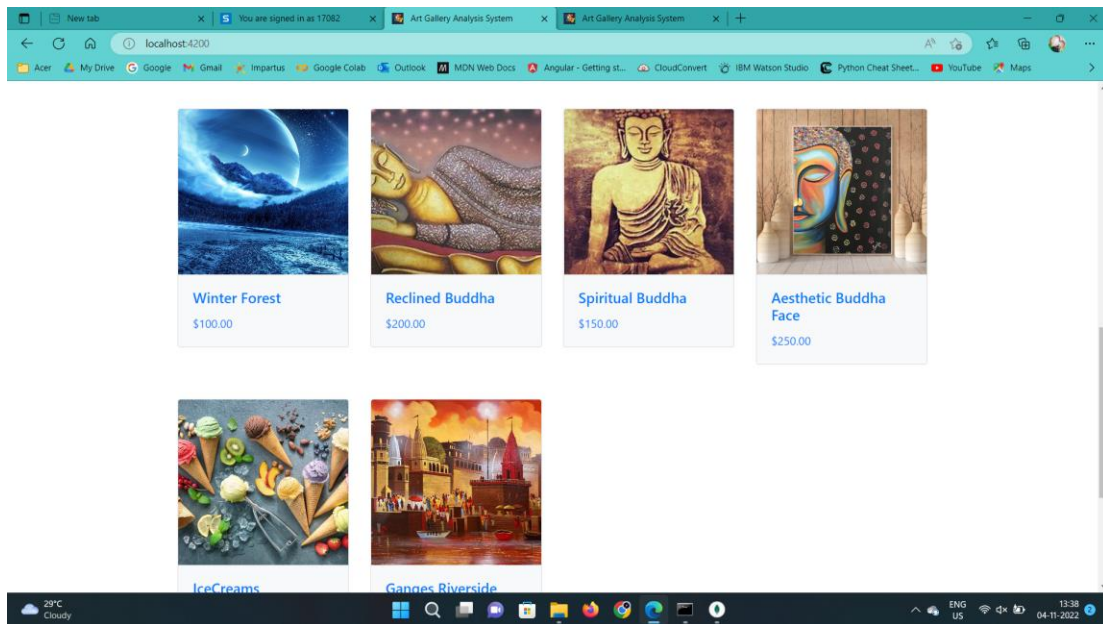
The screenshot shows a web browser window with the URL `localhost:4200/register`. The page features the ARTSY logo and a search bar at the top. Below the header, there is a registration form titled "Registration". The form contains the following fields and elements:

- Name:
- Email:
- Password:
- Confirm Password:
- ☐ Register as Seller
- Register button: A blue button labeled "Register".

The browser's taskbar at the bottom shows the system time as 13:38 on 04-11-2022.

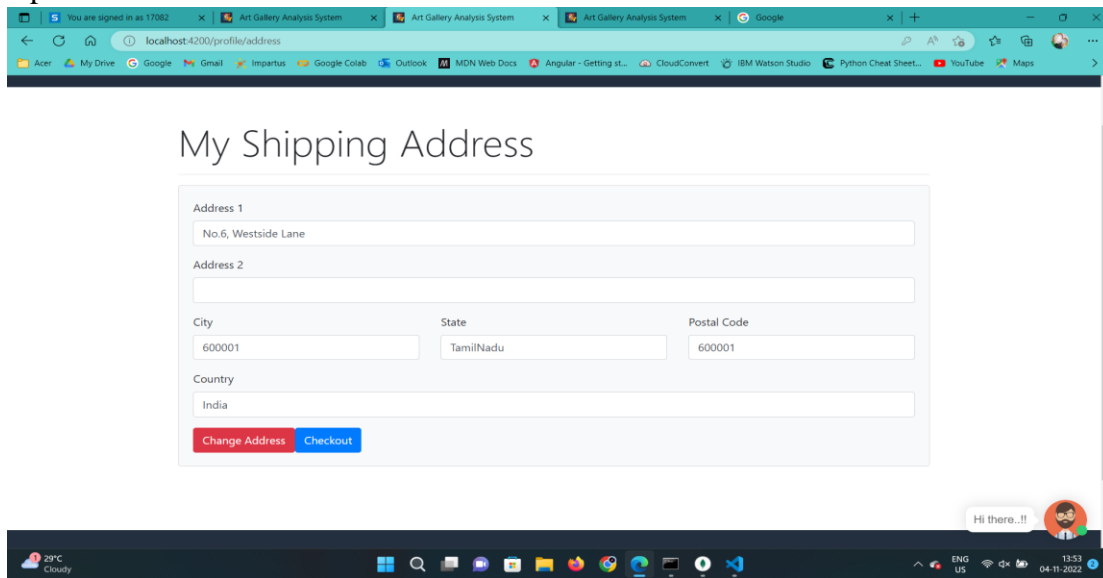
This is the registration form for the user or the seller to register in the site.

Read:



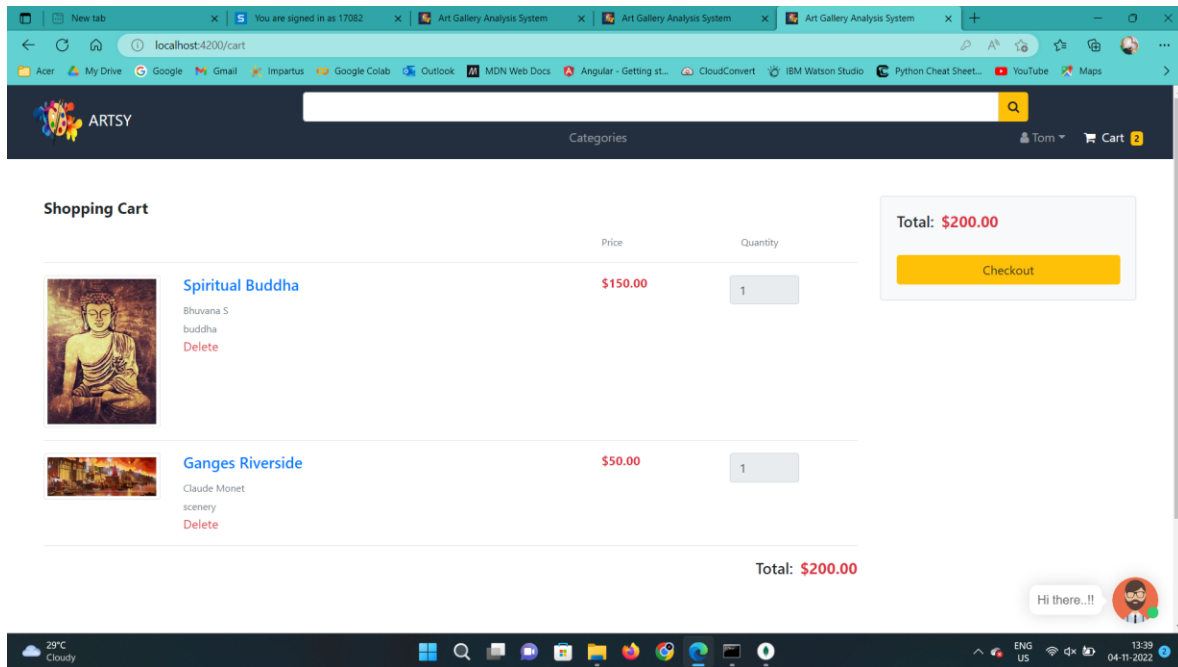
Here both the customers and the sellers can view the various art on display.

Update:



Here, the customer can change his/her address if needed. Their current location can be updated.

Delete:



If any item needs to be deleted from the cart before buying by the customer, it can be performed by deleting it. Through checkout, the customer can buy his/her orders.

CONCLUSION

Hence, Art Gallery Analysis System is developed where the user can register and login with his/her username and password. The artist can login and upload his/her art works. The various features provided by the project is to register, login, add a picture to the cart, buy the product and review the same.