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ENGINEERING & TECHNOLOGY,  
AMRAVATI**

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**SIPNA COLLEGE OF ENGINEERING & TECHNOLOGY  
AMRAVATI.**

Department of **Computer Science**

**Academic Year : 2023-2024**

**Semester : Sixth**

A PROJECT REPORT ON

**EaseConstruct : A Collaboration Hub**

Submitted for

**SOFTWARE ENGINEERING**

Submitted in

**APRIL 2024**

Under The Guidance Of

**Prof. R. Popli**

**SIPNA COLLEGE OF ENGINEERING & TECHNOLOGY,  
AMRAVATI**

**CERTIFICATE**

This is to certify that this mini project report entitled

**“EaseConstruct : A Collaboration Hub”**

has been completed by the following students in the partial fulfillment of project work of the fifth semester, Department of Computer Science and Engineering, During the Academic Session of 2023-2024. This is the record of their work under my guidance and to my immense satisfaction.

Date :     /     / 2024

Prof. R. Popli  
Project Guide

# ACKNOWLEDGEMENT

We take this opportunity to express our deep sense of gratitude and heartfelt thanks to our project guide **Prof. R. Popli** for her invaluable guidance, inspiration and encouragement. It is because of her that we could synchronize our efforts. We also express our sincere thanks to our Head of Department **Dr. V.K. Shandilya** and Principal **Dr. Sanjay M. Kherde** for their tremendous support, encouragement and invaluable guidance throughout our project. We shall be failing in our duties until and unless we express our sincere thanks to all the faculty members, both teaching and non-teaching Staff, and our friends who have directly or indirectly contributed of our project work.

## **Group members:**

- 1. MANISH DHAYE**
- 2. MANDAR CHATUR**
- 3. ANUSHKA TAYDE**
- 4. MONIKA RATHOD**

**SIPNA C.O.E.T., Amravati.**

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# **Abstract**

Creating an interactive online platform for interior design enthusiasts, professionals, and homeowners to seamlessly collaborate, share ideas, and access a diverse range of design resources. The required software is easily available and easy to work with. This web application can maintain and view computerized records without getting redundant entries. The project describes how to manage user data for good performance and provide better services for the client.

# **Introduction**

Despite the increasing demand for new homes and construction projects, individuals often encounter challenges when navigating the fragmented and complex process of home building. Existing platforms and resources lack cohesion and fail to provide a streamlined experience, leaving users overwhelmed and frustrated. As a result, there is a pressing need for an integrated online platform that consolidates all three pillars of the construction process – design, procurement, and construction – into one convenient location. This web application is reduced as much as possible to avoid errors while entering data. It also provides error message while entering invalid data. It is user-friendly as no formal knowledge is required to use the system. Human resource challenges are faced by every organization which has to be overcome by the organization.

# Description Of Software Using SDLC Phases

## 1 ) Requirement Phase :

- **Problem Statement :-**

Creating an **interactive online platform** for **interior design enthusiasts, professionals, and homeowners** to seamlessly collaborate, share ideas, and access a diverse range of design resources.

This **platform aims to revolutionize the interior design industry** by providing personalized design solutions, facilitating efficient communication between designers and clients, and integrating innovative features to enhance user experience and satisfaction.

- **Objectives Of Software :-**

**Enhanced User Experience:** Offer a user-friendly interface that allows users to explore a wide range of interior design catalogs, styles, and ideas easily.

**Diverse Design Options:** Provide access to a vast variety of interior design concepts, ranging from modern and contemporary to traditional and eclectic, ensuring users can find designs that suit their preferences.

**Facilitate Collaboration:** Enable users to collaborate with interior designers, architects, and other professionals to

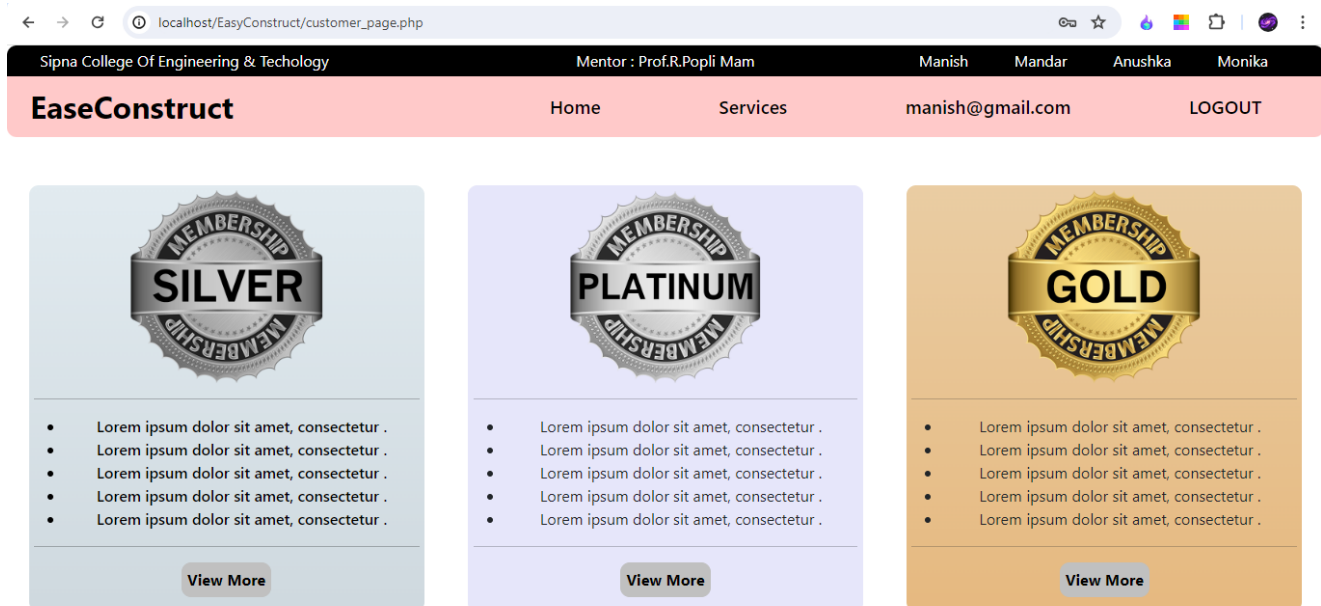
personalize design plans, receive expert advice, and make informed decisions about their home decor projects.

**Streamlined Business Processes:** Empower interior designers to showcase their portfolios, highlight their expertise, and attract potential clients through the platform. This includes sharing work samples, project histories, and client testimonials to build credibility and trust.

**Efficient Communication:** Foster seamless communication channels between designers and clients, allowing for effective exchange of ideas, feedback, and project updates throughout the design process.

By achieving these objectives, the online interior design platform aims to revolutionize the way users conceptualize, plan, and execute their home decor projects while empowering designers to expand their businesses and reach a broader audience in the digital landscape.

Additionally, **Implementing A Subscription Model** tailored for designers will categorize them according to their work experience, seniority, and excellence into distinct categories. This subscription model will not only provide designers with enhanced visibility and credibility but also offer clients the flexibility to choose from a curated selection of designers that align with their specific project requirements and preferences.





## **2 ) Analysis Phase :**

**Certainly, here are some potential risks associated with the development and implementation of the interior design platform:**

**Market Competition:** The interior design industry is highly competitive, with several established players and emerging startups. There's a risk of facing intense competition from existing online platforms and new entrants offering similar services.

**User Adoption:** Ensuring user adoption and engagement can be challenging, especially during the initial stages of the platform launch. There's a risk that users may not find the platform intuitive or compelling enough to use regularly.

**Technical Challenges:** Developing a robust and scalable online platform requires expertise in various technologies and frameworks. Technical challenges such as system crashes, data breaches, or performance issues could impact user experience and undermine trust in the platform.

**Data Security and Privacy:** Handling sensitive user data, including personal information and design preferences, raises concerns about data security and privacy. A data breach or privacy violation could lead to legal repercussions and damage the platform's reputation.

**Subscription Model Acceptance:** The success of the subscription model relies on designers' willingness to subscribe and clients' willingness to pay for premium design services.

**Quality of Designers:** Categorizing designers based on their work experience, seniority, and excellence requires careful evaluation and

verification processes. There's a risk of misrepresentation or inconsistency in the quality of designers available on the platform.

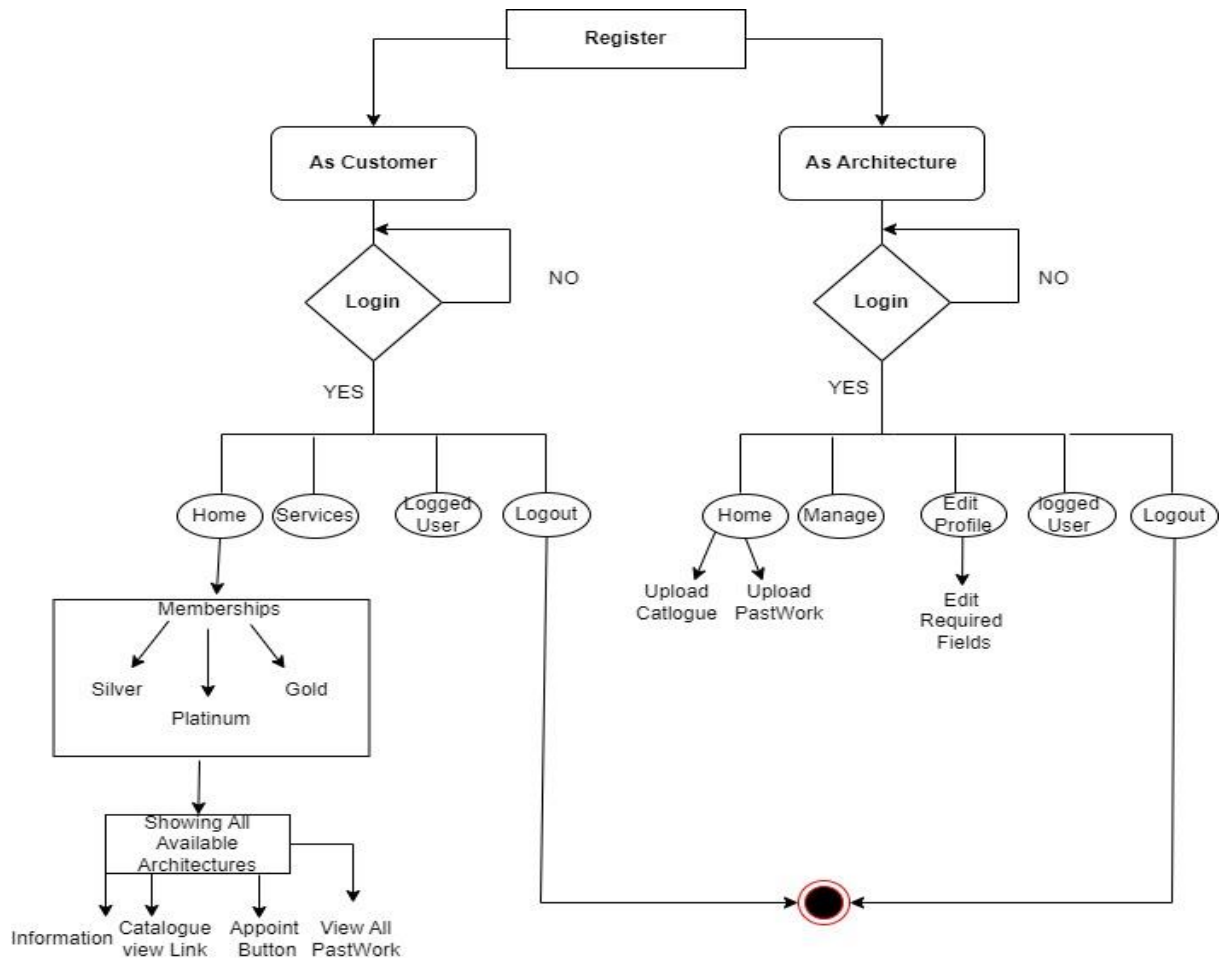
**Platform Usability and Performance:** Poor user interface design, slow loading times, or navigation difficulties can deter users from engaging with the platform. Ensuring seamless usability and optimal performance across different devices and internet connections is crucial for user satisfaction.

**Regulatory Compliance:** Compliance with regulations related to data protection, intellectual property rights, and online transactions is essential to avoid legal liabilities. Failure to adhere to regulatory requirements could result in fines, lawsuits, or reputational damage.

**Dependency on Third-party Providers:** Reliance on third-party services for hosting, payment processing, or data storage introduces a dependency risk. Issues with third-party providers, such as service outages or changes in terms of service, could disrupt platform operations.

Addressing these risks requires proactive risk management strategies, including thorough market research, robust cybersecurity measures, continuous user feedback, compliance audits, and agile development practices. By identifying and mitigating potential risks early in the project lifecycle, the interior design platform can increase its chances of success and achieve its objectives effectively.

### 3)Design Phase :



## 4 ) Coding Phase :

During the code phase, we implemented the designed system using appropriate programming languages and frameworks. The development process involved:

- **Front-end development:** Writing HTML, CSS, and JavaScript code for the user interface.
- **Back-end development:** Implementing server-side logic using technologies like PHP .
- **Database implementation:** Creating and configuring the database using MySQL.
- **Integration:** Integrating various modules and components to ensure seamless functionality.

```
index.php x
index.php
2 <html lang="en">
14 <body>
16
17 <header>
18 <nav class="navbar">
19 <a class="logo" href="index.php">EaseConstruct<span>.</span></a>
20 <ul class="menu-links">
21 <span id="close-menu-btn" class="material-symbols-outlined">close</span>
22 <li><a href="#">Home</a></li>
23 <li><a href="#">Products</a></li>
24 <li><a href="#">Services</a></li>
25 <li><a href="#">About us</a></li>
26 <li><a href="#">Contact us</a></li>
27 </ul>
28 <span id="hamburger-btn" class="material-symbols-outlined">menu</span>
29 </nav>
30 </header>
31
32 <section class="hero-section">
33 <div class="content">
34 <h2>Design Your Home With EaseConstruct.</h2>
35 <p style=" font-weight:500;">Welcome to our EaseConstruct. , Discover the art of interior design and construction excellence. Let us bring your
dream space to life with our expert craftsmanship. Explore our services and embark on a journey to transform your surroundings today!</p>
36 <a href="customer_login.php"><button><b>As Customer</b></button></a>
37 <a href="arch_login.php"><button><b>As Architecture</b></button></a>
38
39 </div>
40 </section>
41
42 <script>
43 const header = document.querySelector("header");
44 const hamburgerBtn = document.querySelector("#hamburger-btn");
45 const closeMenuBtn = document.querySelector("#close-menu-btn");
46
47 // Toggle mobile menu on hamburger button click
48 hamburgerBtn.addEventListener("click", () => header.classList.toggle("show-mobile-menu"));
49
50 // Close mobile menu on close button click
51 closeMenuBtn.addEventListener("click", () => hamburgerBtn.click());
```

```

index.php arch_login.php X
arch_login.php
1 <?php
2 session_start();
3 // Check if user is already logged in, if yes, redirect to user page
4 if(isset($_SESSION['loggedin']) && $_SESSION['loggedin'] == true){
5     header("location: arch_page.php");
6     exit;
7 }
8
9
10 $login = false;
11 $showError = false;
12 if($_SERVER["REQUEST_METHOD"] == "POST"){
13     include 'connect.php';
14     $email = $_POST['email'];
15     $password = $_POST['password'];
16
17     $sql = "Select arch_id, arch_name, arch_mail, arch_pass from registered_architecture where arch_mail='$email' AND arch_pass='$password'";
18     $result = mysqli_query($conn, $sql);
19     $num = mysqli_num_rows($result);
20     if ($num == 1){
21         $login = true;
22         session_start();
23         $_SESSION['loggedin'] = true;
24         $_SESSION['arch_id'] = $arch_id;
25         $_SESSION['arch_mail'] = $email;
26         $_SESSION['arch_name'] = $arch_name;
27         header("location: arch_page.php");
28         exit();
29     }
30     else{
31         $showError = "Invalid Credentials";
32     }
33 }
34

```

```

Run ... EasyConstruct
hp arch_login.php X
login.php
<html lang="en">
<body>
<div class="mid">
<section class="box">
<div class="container my-4">
<form action="arch_login.php" method="post">
<div class="form-group">
<label for="email"><b>E-Mail ID :</b></label>
<input type="text" class="form-control" id="mail" name="email"
aria-describedby="emailHelp">
</div>
<div class="form-group">
<label for="password"><b>Password :</b></label>
<input type="password" class="form-control" id="password" name="password">
</div>
<div class="forget_register">
<h6>If you are new ? Then <a href="arch_register.php">REGISTER HERE</a></h6>
<h6><a href="">Forget Password ?</a></h6>
</div>
<div class="g-recaptcha" data-sitekey="6Lc0-qEpAAAAAA1hYNg4DSKyAsws-eW1eeYAIXT-" data-callback="enableBtn"></div>
<div class="reset_login">
<input type="submit" value="Login" href="" id="btn" disabled="" disabled="">
<button type="submit" class="reset-btn btn-primary">Reset</button>
</div>
</form>
</div>
</center>
Ln 91, Col 96 Spaces: 4 UTF-8 CRLF PHP Go Live

```

index.php connect.php X

```

connect.php
1 <?php
2
3 $conn = mysqli_connect('localhost', 'root', '', 'easeconstruct');
4
5 if(!$conn)
6 {
7     echo 'Error';
8 }
9
10

```

```

index.php arch_register.php x
arch_register.php
7 $showAlert = false;
8
9 if (isset($_POST["submit"]))
10 {
11     include 'connect.php';
12
13     $name = $_POST["name"];
14     $mobile_no = $_POST["mobile_no"];
15     $dob = $_POST["dob"];
16     $mail = $_POST["mail"];
17     $password = $_POST["password"];
18     $c_password = $_POST["c_password"];
19
20     $photo = rand(1000,10000)."-".$_FILES["file"]["name"];
21
22     #temporary file name to store file
23     $tname = $_FILES["file"]["tmp_name"];
24
25     #upload directory path
26     $uploads_dir = 'C:\xampp\htdocs\EasyConstruct\Architecture_Photo';
27
28     #TO move the uploaded file to specific location
29     move_uploaded_file($tname, $uploads_dir.'/'.$photo);
30
31     $exists=false;
32     if(($password == $c_password) && $exists==false){
33         $sql = "INSERT INTO `registered_architecture` ( `arch_name`, `arch_mobile`, `arch_dob`, `arch_mail`, `arch_pass`, `arch_c_pass`, `arch_photo`) VALUES";
34
35         $result = mysqli_query($conn, $sql);
36
37         if ($result){
38             $showAlert = true;
39         }
40     }
41     else{
42         $showError = "Passwords do not match!";
43     }
44 }

```

```

index.php arch_register.php x
arch_register.php
56 <html lang="en">
57 <body>
58 <div class="mid">
59 <section class="box">
60     Architecture's Registration Form</n2>
61
62     <hr>
63
64     <center>
65         <div class="container my-4">
66             <form action="arch_register.php" method="post" enctype="multipart/form-data">
67
68                 <div class="form-group">
69                     <label for="name"><b>Full Name :</b></label>
70                     <input type="text" class="form-control" id="name" name="name">
71                 </div>
72
73                 <div class="form-group" class="dob_no" style="display: flex; justify-content: center; margin-top: 35px;">
74
75                     <label for="mobile_no"><b>Mobile No. :</b></label>
76                     <input type="number" class="form-control" id="mobile_no" name="mobile_no"
77                         style="width: 25%;">
78
79                     <label for="dob"><b>DOB :</b></label>
80                     <input type="date" class="form-control" id="dob" name="dob" style="width: 25%;">
81                 </div>
82
83                 <div class="form-group">
84                     <label for="mail"><b>Email ID :</b></label>
85                     <input type="text" class="form-control" id="mail" name="mail"
86                         aria-describedby="emailHelp">
87                 </div>
88
89                 <div class="form-group">
90                     <label for="password"><b>Password :</b></label>
91                     <input type="password" class="form-control" id="password" name="password" style="width: 45%;">
92                 </div>
93             </form>
94         </div>
95     </center>
96 </div>
97 </body>
98 </html>

```

localhost/phpmyadmin/index.php?route=/database/structure&db=easeconstruct

### phpMyAdmin

Recent Favorites

- New
- easeconstruct
  - New
  - catalogue
  - images
  - registered\_architecture
  - registered\_customer
- information\_schema
- mysql
- performance\_schema
- phpmyadmin
- test

Server: 127.0.0.1 Database: easeconstruct

Structure SQL Search Query Export Import Operations Privileges Routines Events Triggers More

Filters

Containing the word:

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> catalogue	Browse  Structure  Search  Insert  Empty  Drop	1	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> images	Browse  Structure  Search  Insert  Empty  Drop	7	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
<input type="checkbox"/> registered_architecture	Browse  Structure  Search  Insert  Empty  Drop	2	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> registered_customer	Browse  Structure  Search  Insert  Empty  Drop	2	InnoDB	utf8mb4_general_ci	16.0 KiB	-
4 tables	Sum	12	InnoDB	utf8mb4_general_ci	64.0 KiB	0 B

☐ Check all With selected:

Print Data dictionary

Create new table

Table name:  Number of columns:

Console

Server: 127.0.0.1 Database: easeconstruct Table: registered\_architecture

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Table structure Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/> 1	arch_id	int(100)			No	None		AUTO_INCREMENT	Change  Drop  More
<input type="checkbox"/> 2	arch_name	varchar(100)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/> 3	arch_mobile	text	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/> 4	arch_dob	date			No	None			Change  Drop  More
<input type="checkbox"/> 5	arch_mail	varchar(100)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/> 6	arch_pass	varchar(100)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/> 7	arch_c_pass	varchar(100)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/> 8	arch_photo	varchar(1000)	utf8mb4_general_ci		No	None			Change  Drop  More

☐ Check all With selected: Browse Change Drop Primary Unique Index Spatial Fulltext

Add to central columns Remove from central columns

Print Propose table structure Track table Move columns Normalize

Add  column(s) after arch\_photo

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
--------	---------	------	--------	--------	--------	-------------	-----------	------	---------

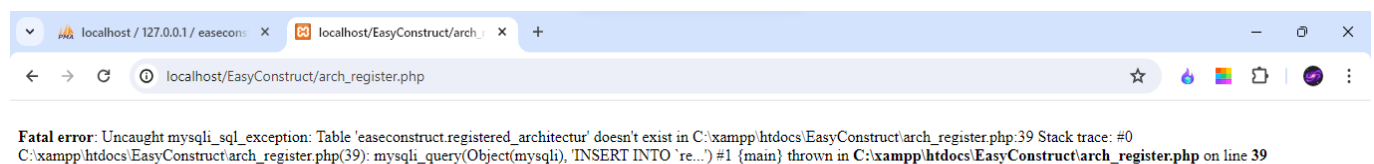
## 5 ) Testing Phase :

The testing phase involved rigorous testing of the Interior Design & Construction Management System to ensure its reliability, functionality, and performance. Testing activities included:

- **Unit testing:** Testing individual modules and components to verify their correctness.
- **Integration testing:** Testing the interaction between different modules to ensure they work together as expected.
- **System testing:** Testing the entire system to validate its compliance with the specified requirements.
- **User acceptance testing:** Involving stakeholders to validate the system's usability and effectiveness in real-world scenarios.

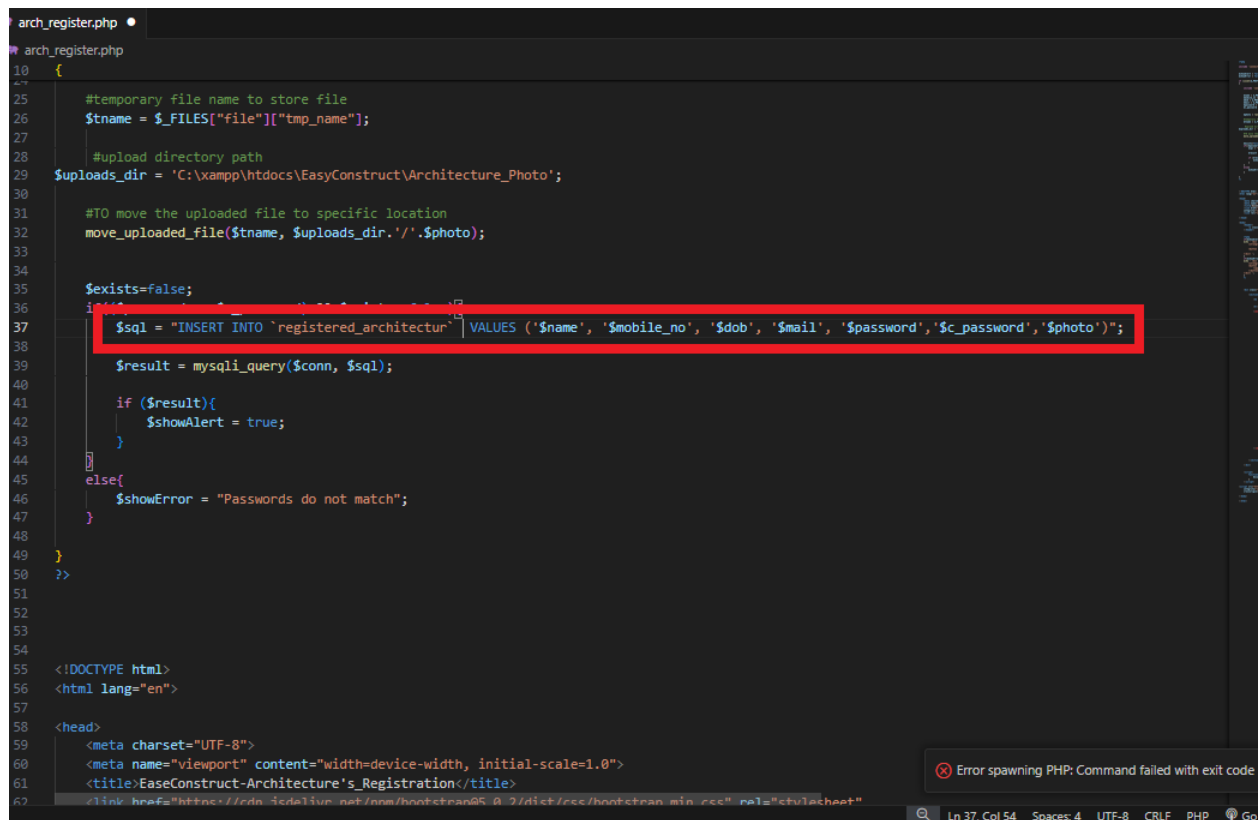
While Testing ,

- 1) we encountered an error in our backend code when we were trying to register by filling each field it's showing error shown below :





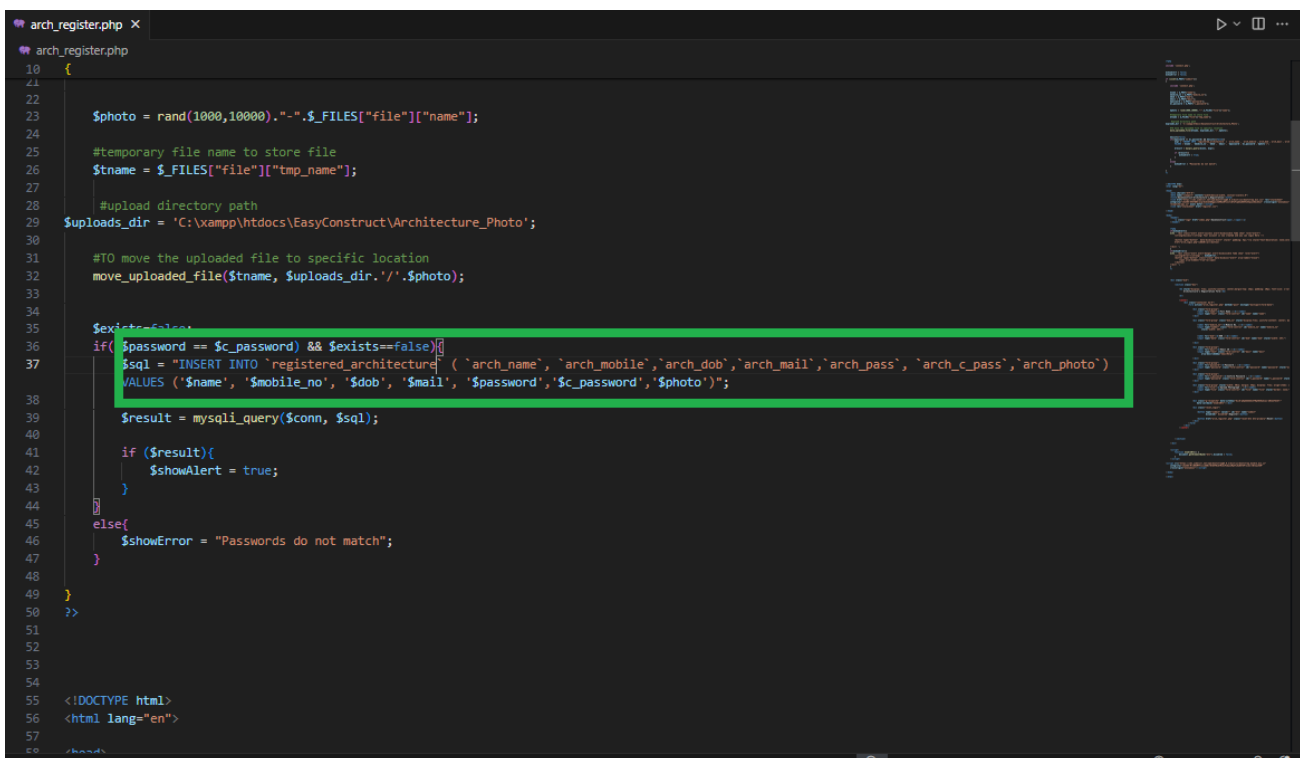
2) Actually , this error was thrown due to wrong syntax of INSERT Query which inserts all the said data to mentioned table of our Database , As Shown Below :



```
arch_register.php
arch_register.php
10 {
25 #temporary file name to store file
26 $tname = $_FILES["file"]["tmp_name"];
27
28 #upload directory path
29 $uploads_dir = 'C:\xampp\htdocs\EasyConstruct\Architecture_Photo';
30
31 #TO move the uploaded file to specific location
32 move_uploaded_file($tname, $uploads_dir.'/'.$photo);
33
34
35 $exists=false;
36 if( $password == $c_password ) {
37     $sql = "INSERT INTO 'registered_architectur' VALUES ('$name', '$mobile_no', '$dob', '$mail', '$password', '$c_password', '$photo')";
38     $result = mysqli_query($conn, $sql);
39
40     if ($result){
41         $showAlert = true;
42     }
43 }
44 else{
45     $showError = "Passwords do not match";
46 }
47
48 }
49 }
50 }
51 }
52
53 <!DOCTYPE html>
54 <html lang="en">
55
56 <head>
57     <meta charset="UTF-8">
58     <meta name="viewport" content="width=device-width, initial-scale=1.0">
59     <title>EaseConstruct-Architecture's Registration</title>
60     <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet">
61
62
```

Error spawning PHP: Command failed with exit code

2) We solved above Syntax Error , As Shown Below :



```
arch_register.php X
arch_register.php
10 {
22
23 $photo = rand(1000,10000)."-".$_FILES["file"]["name"];
24
25 #temporary file name to store file
26 $tname = $_FILES["file"]["tmp_name"];
27
28 #upload directory path
29 $uploads_dir = 'C:\xampp\htdocs\EasyConstruct\Architecture_Photo';
30
31 #TO move the uploaded file to specific location
32 move_uploaded_file($tname, $uploads_dir.'/'.$photo);
33
34
35 $exists=false;
36 if( $password == $c_password ) && $exists==false){
37     $sql = "INSERT INTO 'registered_architecture' ( 'arch_name', 'arch_mobile', 'arch_dob', 'arch_mail', 'arch_pass', 'arch_c_pass', 'arch_photo')
38     VALUES ('$name', '$mobile_no', '$dob', '$mail', '$password', '$c_password', '$photo')";
39     $result = mysqli_query($conn, $sql);
40
41     if ($result){
42         $showAlert = true;
43     }
44 }
45 else{
46     $showError = "Passwords do not match";
47 }
48
49 }
50 }
51 }
52
53 <!DOCTYPE html>
54 <html lang="en">
55
56 <head>
57
58
```

3) Now , we can register And further Login Easily :

Architecture's Registration Form

Full Name :  
Demo

Mobile No.: 12345678 DOB: 04/25/2024

Email ID :  
a@gmail.com

Password :  
\*\*\*\*

Confirm Password :  
\*\*\*\*

Upload Photograph: Choose File user.png

I'm not a robot

Register Reset

EaseConstruct.

Success! Your account is now created and you can login Here --> LOGIN

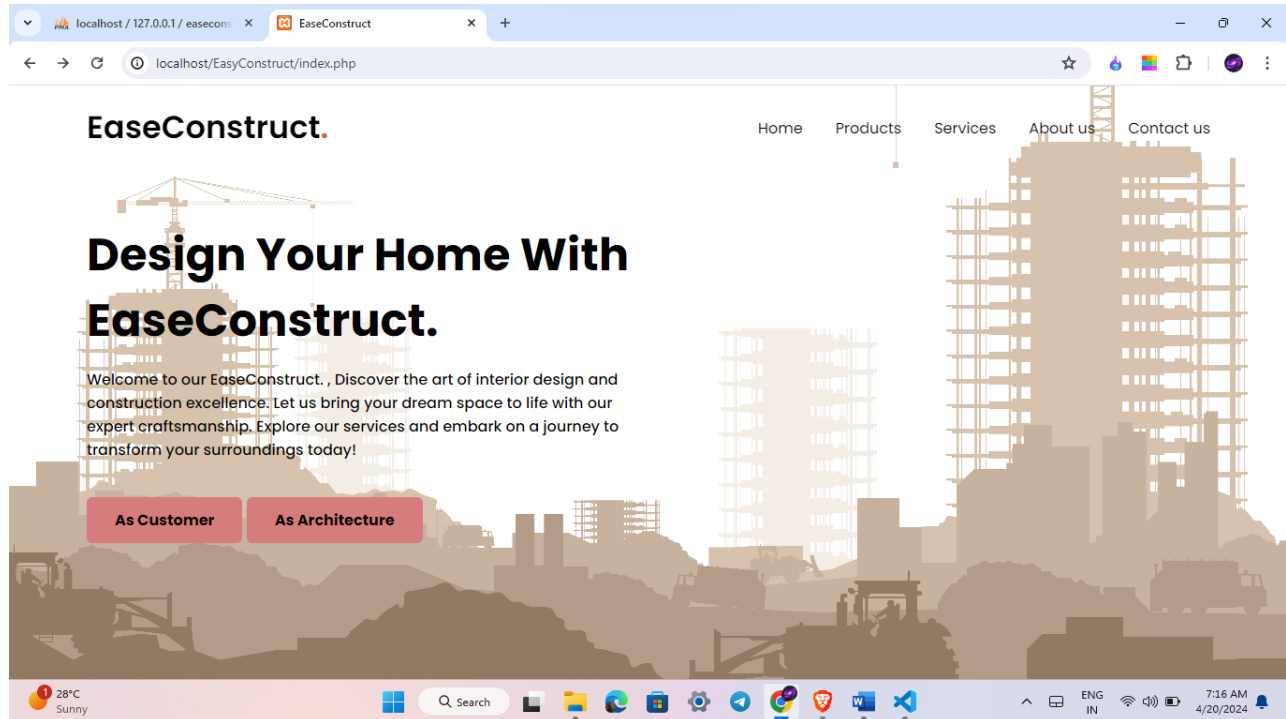
Architecture's Registration Form

Full Name :

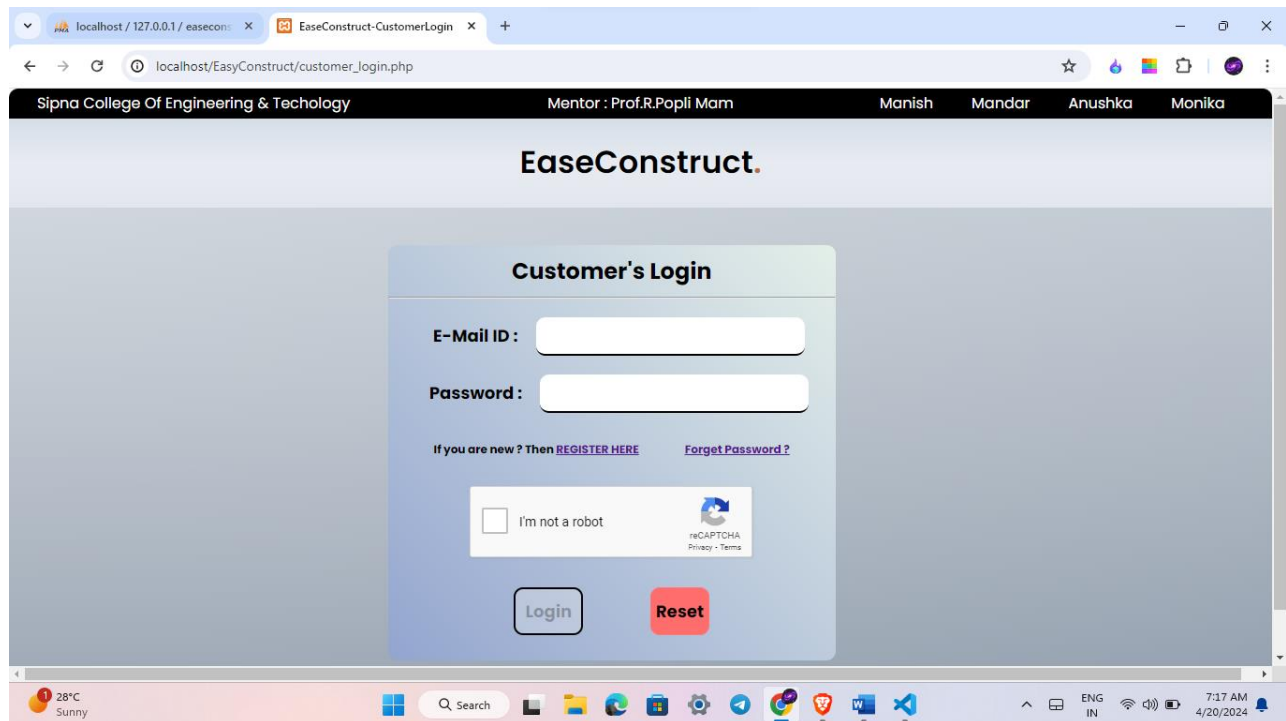
Mobile No.: DOB: mm/dd/yyyy

Email ID :

# Snapshots :-



## Main Home Page



## Customers Login

The screenshot shows a web browser window with two tabs: 'localhost / 127.0.0.1 / easecons' and 'EaseConstruct-Customer\_Regi'. The address bar shows 'localhost/EasyConstruct/customer\_register.php'. The page displays a 'Customer Registration Form' with the following fields and elements:

- Full Name :** A text input field.
- Mobile No. :** A text input field.
- DOB :** A date input field with the placeholder 'mm/dd/yyyy' and a calendar icon.
- Email ID :** A text input field.
- Password :** A text input field.
- Confirm Password :** A text input field.
- Upload Photograph :** A file upload area with a 'Choose File' button and 'No file chosen' text.
- Security:** A checkbox labeled 'I'm not a robot' and a reCAPTCHA widget.
- Buttons:** 'Register' (blue) and 'Reset' (red) buttons at the bottom.

The Windows taskbar at the bottom shows the date and time as 7:17 AM on 4/20/2024.

## Customer's Registration

The screenshot shows a web browser window with two tabs: 'localhost / 127.0.0.1 / easecons' and 'EaseConstruct-ArchitectureLogi'. The address bar shows 'localhost/EasyConstruct/arch\_login.php'. The page displays the 'EaseConstruct.' logo at the top and a central 'Architecture's Login' form with the following fields and elements:

- E-Mail ID :** A text input field.
- Password :** A text input field.
- Links:** 'If you are new ? Then [REGISTER HERE](#)' and '[Forget Password ?](#)'.
- Security:** A checkbox labeled 'I'm not a robot' and a reCAPTCHA widget.
- Buttons:** 'Login' (blue) and 'Reset' (red) buttons at the bottom.

The Windows taskbar at the bottom shows the date and time as 7:18 AM on 4/20/2024.

## Architecture's Login

localhost / 127.0.0.1 / easecons x EaseConstruct-Architecture's x +

localhost/EasyConstruct/arch\_register.php

## EaseConstruct.

### Architecture's Registration Form

Full Name :

Mobile No. :  DOB :

Email ID :

Password :

28°C Sunny 7:18 AM 4/20/2024

## Architecture's Registration

localhost / 127.0.0.1 / easecons x EaseConstruct-ArchitectureLo x +

localhost/EasyConstruct/arch\_login.php


## EaseConstruct.

### Architecture's Login

E-Mail ID :

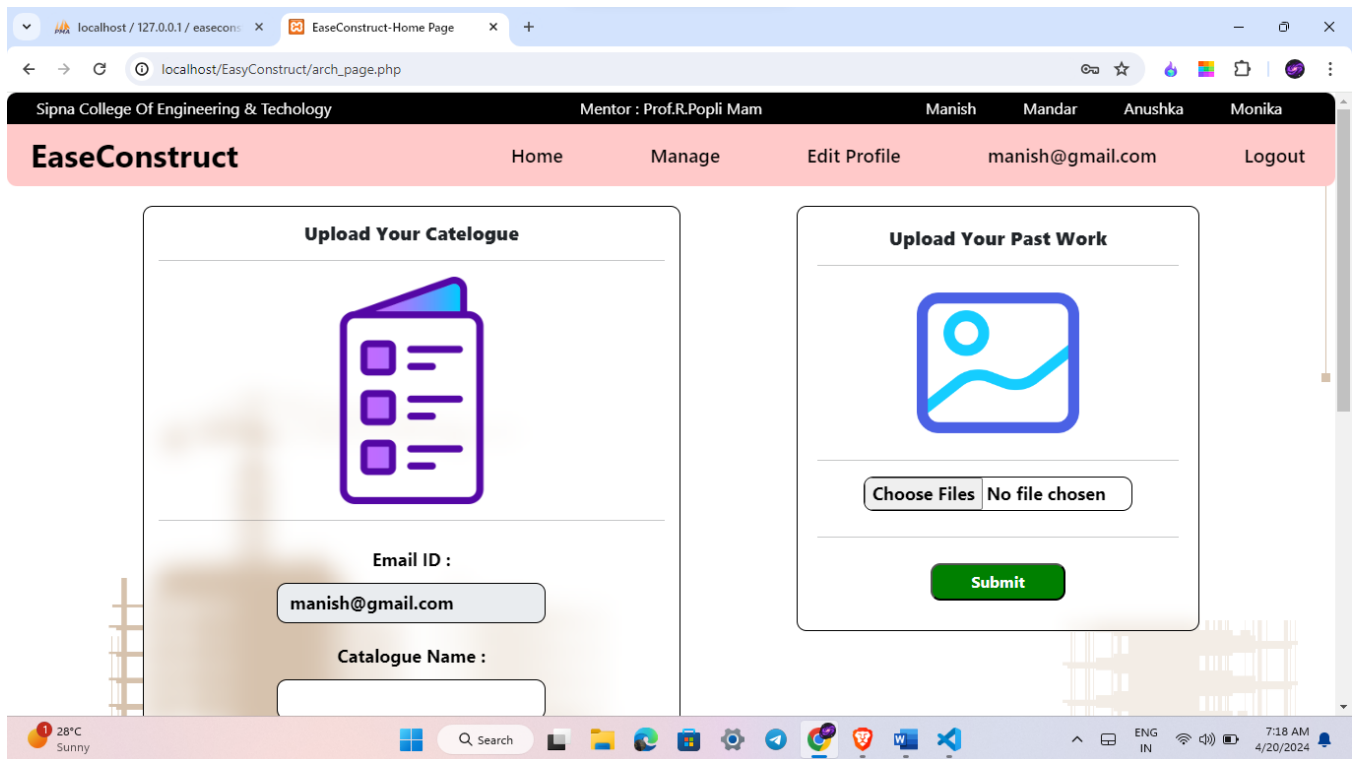
Password :

If you are new ? Then [REGISTER HERE](#) [Forget Password ?](#)

☒ I'm not a robot  reCAPTCHA Privacy - Terms

28°C Sunny 7:18 AM 4/20/2024

## Initiating Login From Architecture



## Architecture Home Page

Email ID :

manish@gmail.com

Catalogue Name :

Description :

Range Of Amount :

Upload Catalogue :

Choose File

No file chosen

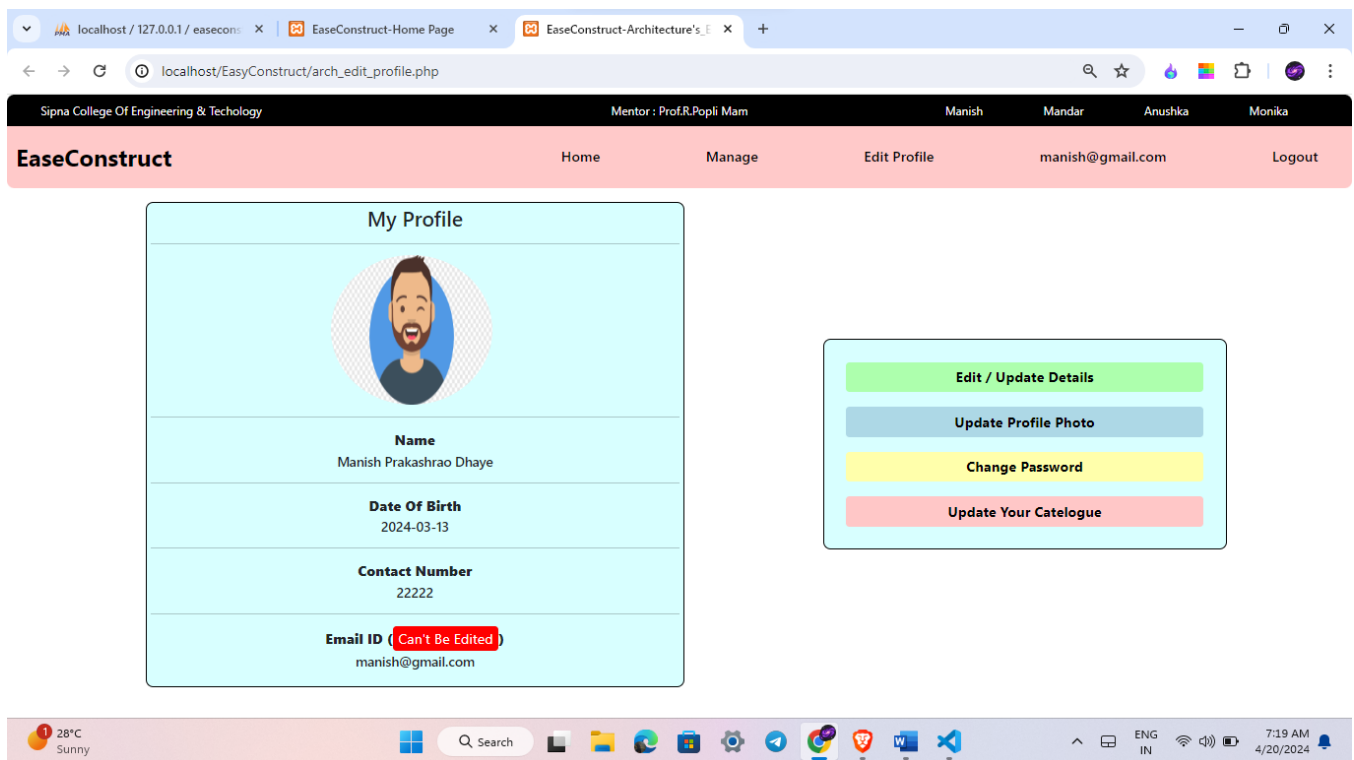
Upload Thumbnail :

Choose File

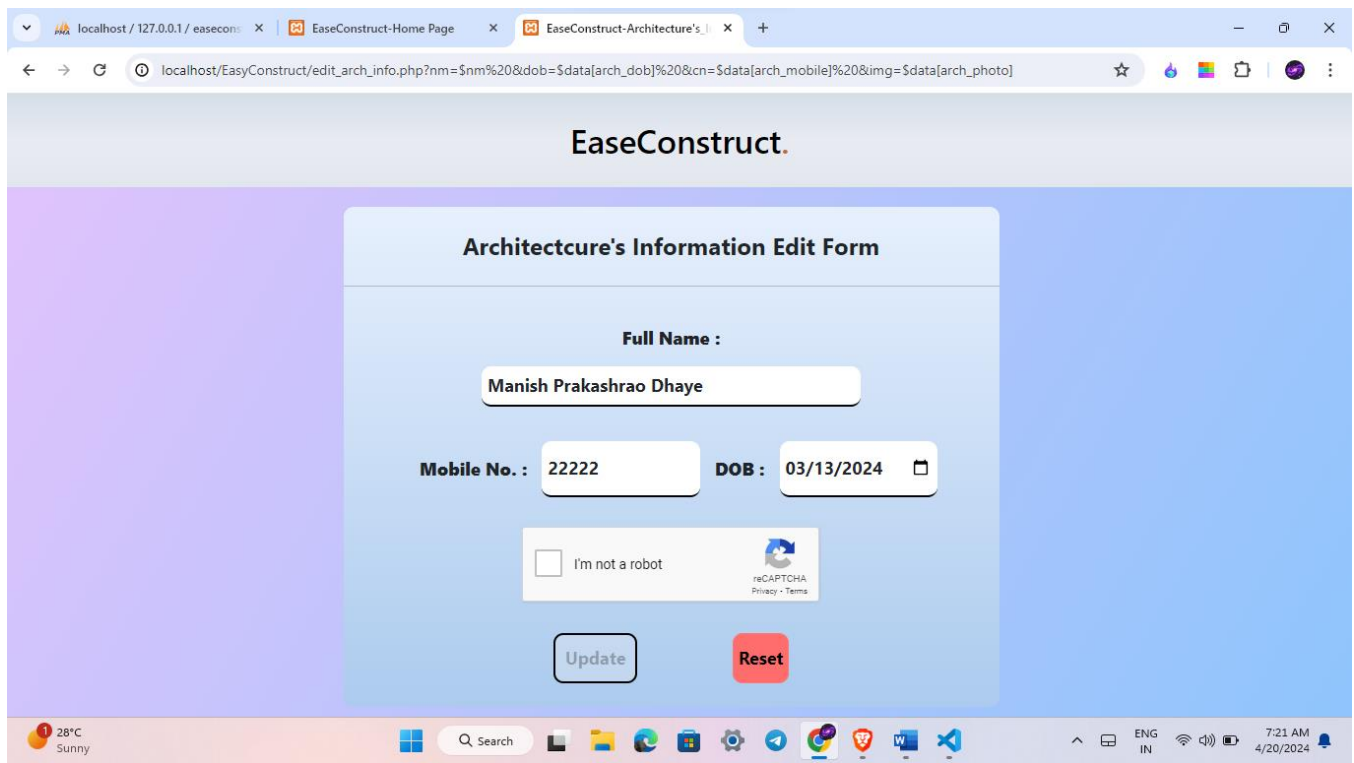
No file chosen

Submit

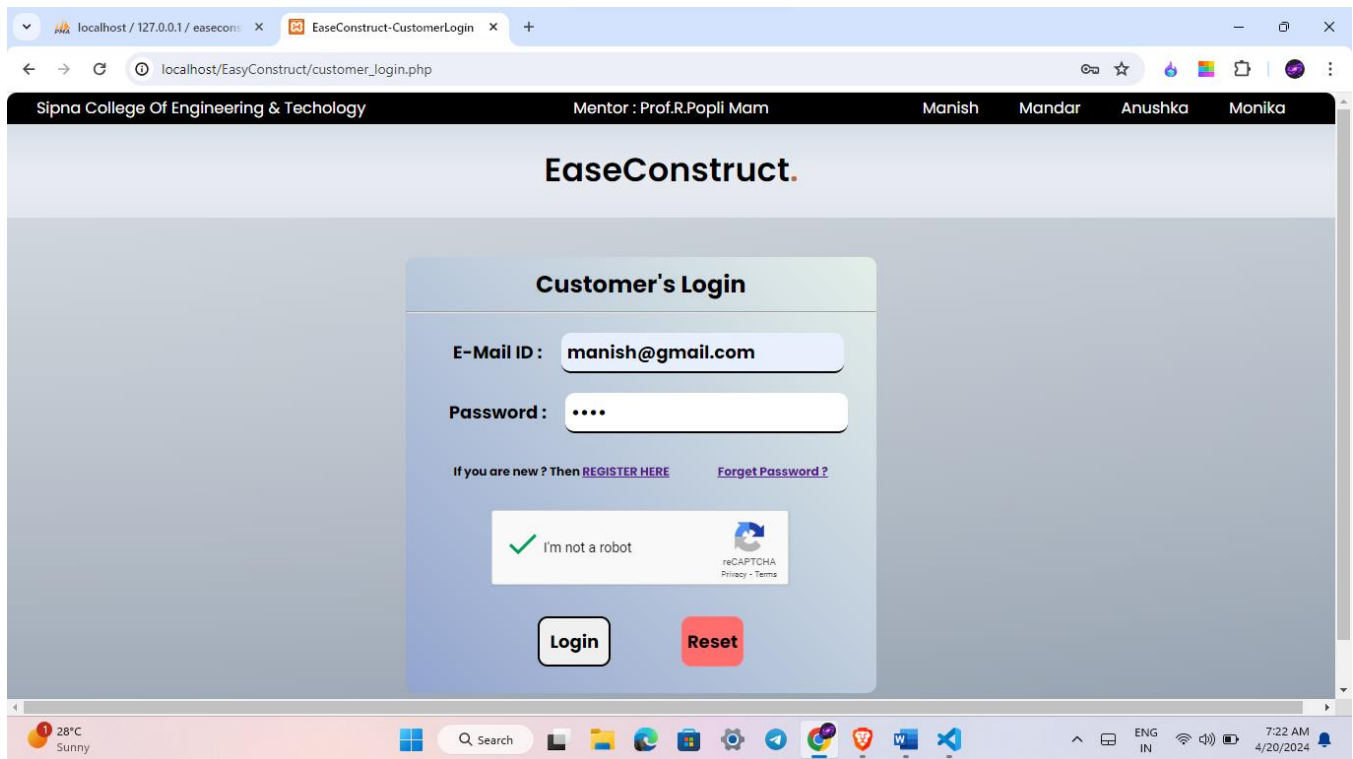
## Architecture's Catalogue Upload



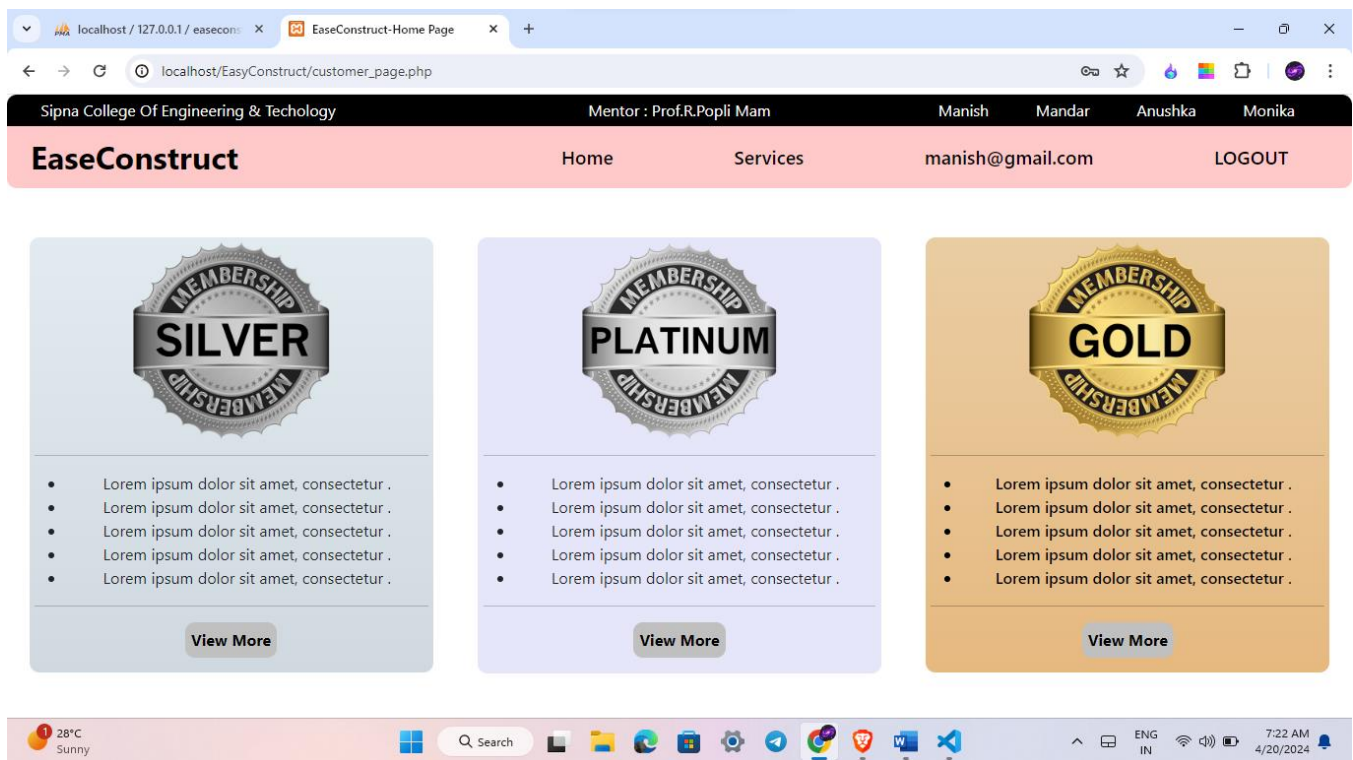
## Architecture's Profile And Edit Page



## Architecture's Information Update Page

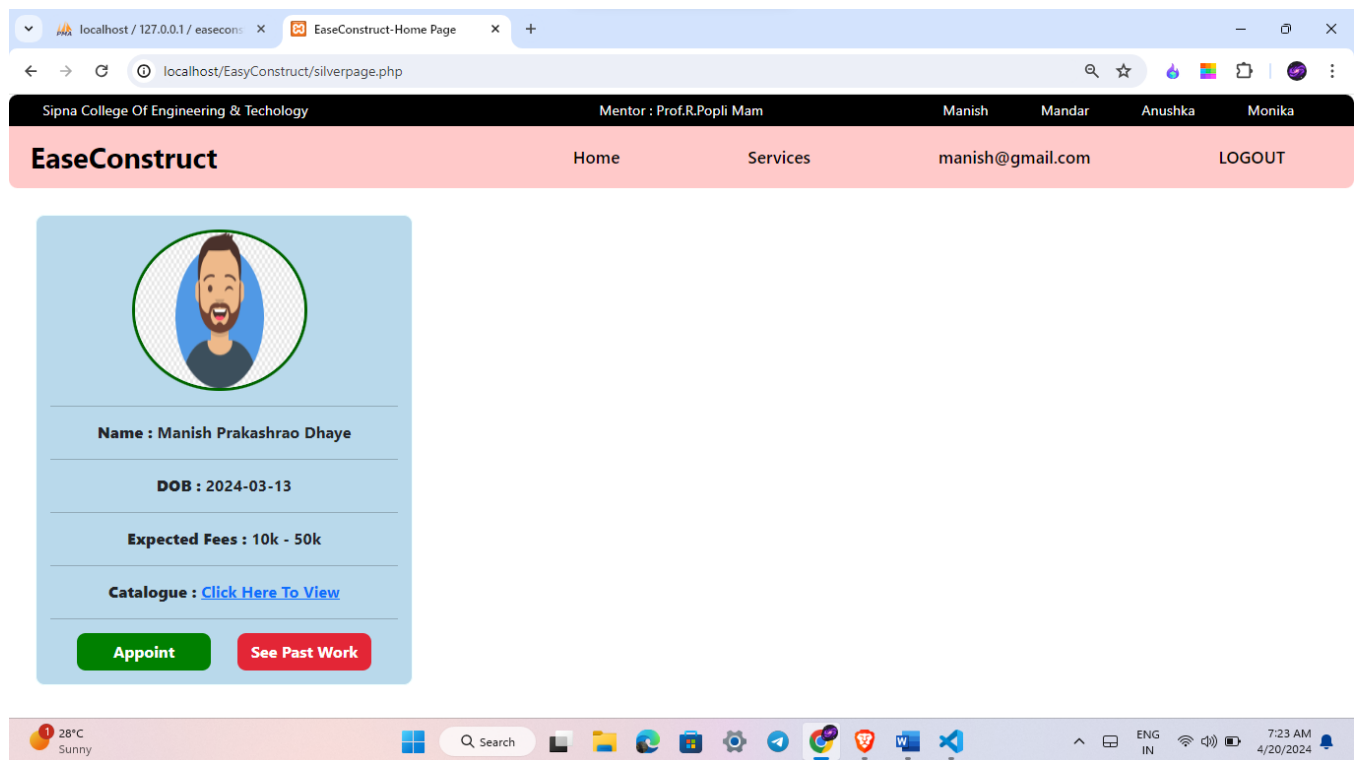


## Customer's Login Page

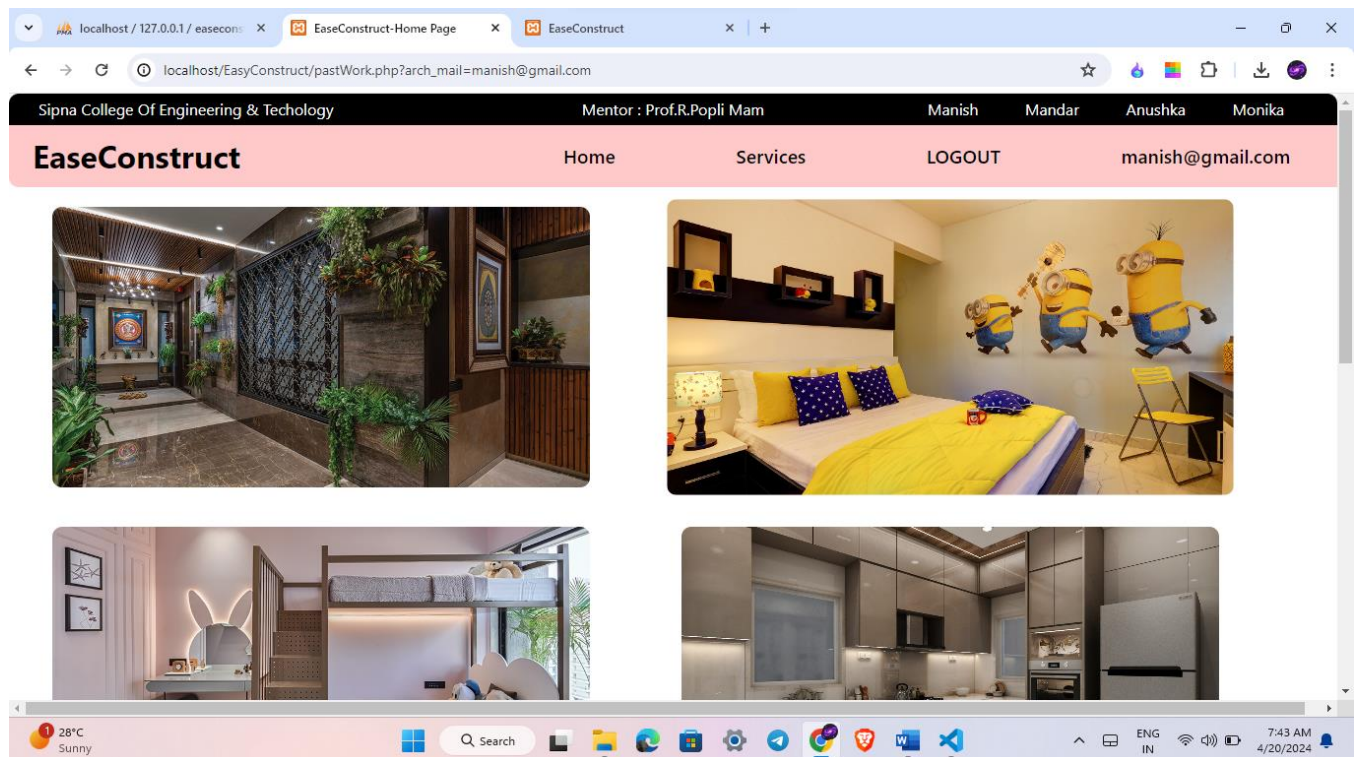


## Customer's Membership Page

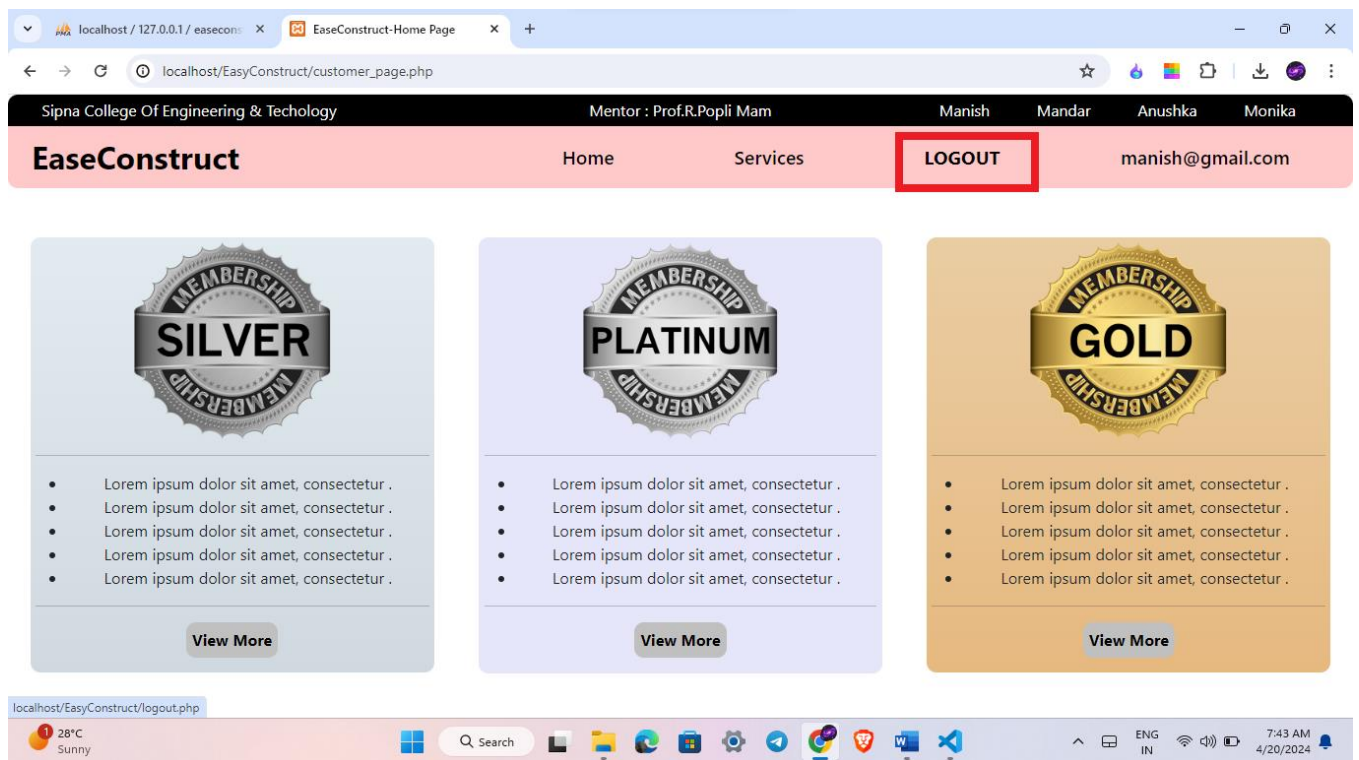




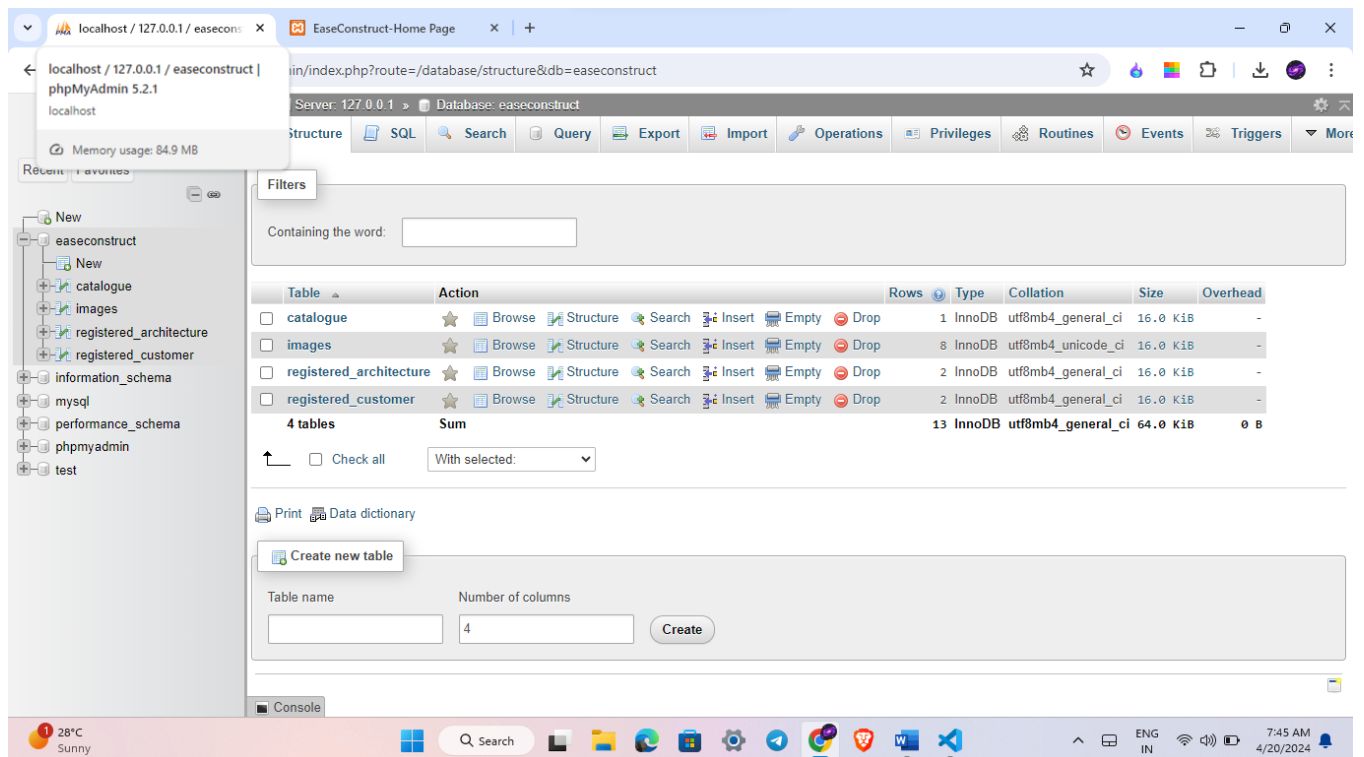
## Customer's LoggedIn Home Page Where Architecture's Profiles Are Visible



## Archihtecture's Previously Work Done Samples



## Logout Button Which Terminates Session .



## Database On Xampp Mysql

## **Conclusion**

Thus , We've made the Mini Project For the Software Engineering And Described the Function of software using SDLC Phases .