

## WEB DEVELOPMENT

### TEMPLATE INHERITANCE

- ✓ Template inheritance is to define common sections on separate templates and reuse them inside other templates.
- ✓ This process makes it easy to create and manage a project's templates because a single template update takes effect on all templates.

## 1. PROJECT : CREATE A PROJECT WITH TEMPLATE INHERITENCE

1. Create a project with Models, Forms and database.

NO	NAME	AGE	CITY	MOBILE	DEPARTMENT	FEES
102	abdul	23	chennai	9874563210	it	3500
110	raj	25	trichy	9889677777	maths	6000
110	raj	25	trichy	9889677777	maths	6000
120	leo	24	coimbatore	9875642310	english	4000
125	yosuva	23	chennai	9875462110	maths	3500
130	rajesw	25	coimba	9874652310	tamil	5000
145	ramesh	24	CHENNAI	9874563210	cs	6000
140	Dinesh	24	trichy	9876543210	tamil	5000
140	Dinesh	24	trichy	9876543210	tamil	5000
150	raj	25	trichy	9876543210	tamil	5000

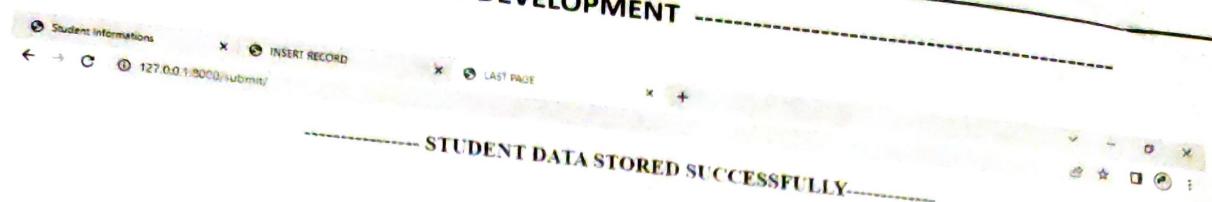
2. Verify the inserting page.

The form contains fields for Sname, Age, City, Mobile, Dep, and Fees, each with a corresponding input field. A 'SUBMIT' button is at the bottom right.

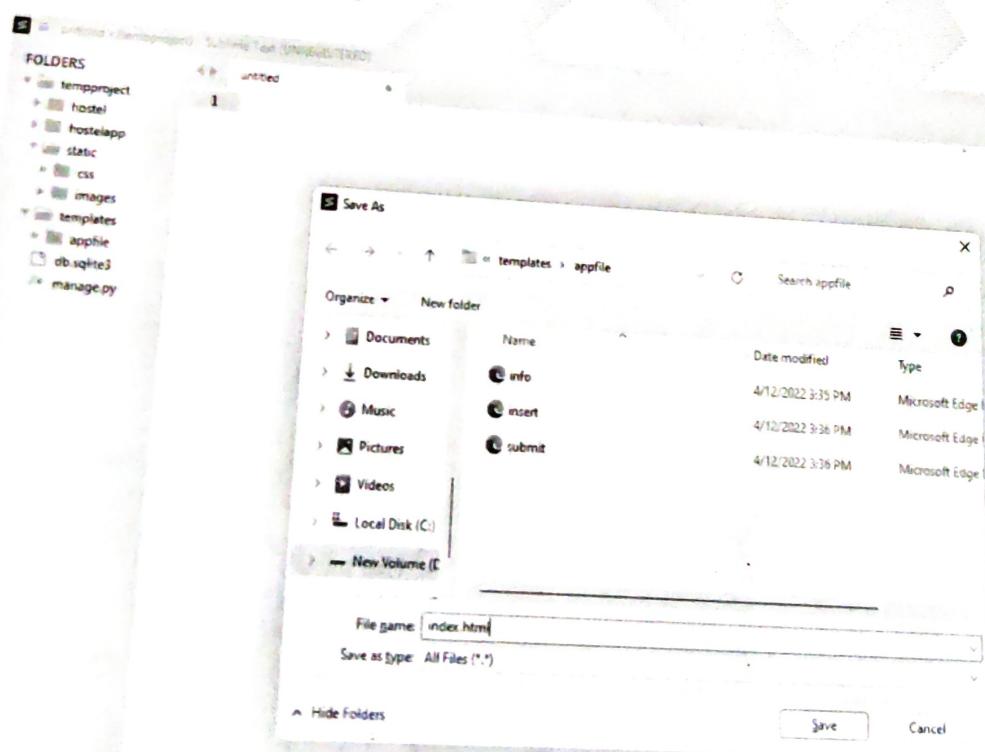
Sno:	<input type="text"/>
Sname:	<input type="text"/>
Age:	<input type="text"/>
City:	<input type="text"/>
Mobile:	<input type="text"/>
Dep:	<input type="text"/>
Fees:	<input type="text"/>

**SUBMIT**

## WEB DEVELOPMENT



### 3. Create index.html file



## 4. Type html file with bootstrap.

bootstrap Link  
copy and paste

```

index.html
<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title></title>
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-1BmE4kWBq78iYhFlvKUhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqy12QyZ6jIWG" crossorigin="anonymous">
    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js" integrity="sha384-ka75k0Gln4gmtz2M1QnikT1wXgYs0g+OMhuP+IlRH9sENBO0LRn5q+8nbTov4+1p" crossorigin="anonymous"></script>
</head>
<body>
<nav class="navbar navbar-expand-lg navbar-light bg-light">
    <div class="container-fluid">
        <a class="navbar-brand" href="#">SYSTECH GROUP </a>
        <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarNavAltMarkup" aria-controls="navbarNavAltMarkup" aria-expanded="false" aria-label="Toggle navigation">
            <span class="navbar-toggler-icon"></span>
        </button>
        <div class="collapse navbar-collapse" id="navbarNavAltMarkup">
            <div class="navbar-nav">
                <a class="nav-link active" aria-current="page" href="#">VIEW</a>
                <a class="nav-link" href="#">UPDATE</a>
                <a class="nav-link" href="#">ADMIN</a>
            </div>
        </div>
    </div>
</nav>
{% block body_block %}
{% endblock %}
</body>
</html>

```

5. Configure View file

```
from django.shortcuts import render
from hostelapp.models import Hostel
from hostelapp.forms import HostelForm

def result(request):
    stud=Hostel.objects.filter(age_range=(20,25))
    return render(request,'appfile/info.html',{'s':stud})

def forms(request):
    form=HostelForm()
    if request.method=="POST":
        form = HostelForm(request.POST)
        if form.is_valid():
            form.save()
        return submit(request)
    return render(request,'appfile/insert.html',{'f':form})

def submit(request):
    return render(request,'appfile/submit.html')
```

## WEB DEVELOPMENT

### 6. Configure Url file

```
urls.py
"""
hostel URL Configuration

The 'urlpatterns' list routes URLs to views. For more information please see:
    https://docs.djangoproject.com/en/4.0/topics/http/urls/
Examples:
Function views
1. Add an import: from my_app import views
2. Add a URL to urlpatterns: path('', views.home, name='home')
Class-based views
1. Add an import: from other_app.views import Home
2. Add a URL to urlpatterns: path('', Home.as_view(), name='home')
Including another URLconf
1. Import the include() function: from django.urls import include, path
2. Add a URL to urlpatterns: path('blog/', include('blog.urls'))
...
from django.contrib import admin
from django.urls import path
from hostelapp import views

urlpatterns = [
    path('admin/', admin.site.urls),
    path('info/',views.result),
    path('insert/',views.forms),
    path('submit/',views.submit),
    path('index/',views.home)
]
```

### 7. Verify the result.



## 8. Add Nav bar in index page.

```

index.html
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title></title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-1BmE4kWBq78iYhFldyKuhfTAU6auJ8tT94WhHftjDbrcCEXSU1oBody12QvZ6jIW3" crossorigin="anonymous">
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js" integrity="sha384-ka7Sk0Gln4gmtz2MIQnikT1wXgYsOg+OMhuP+IIRH9sENBOOLRn5q+8nbTov4+Ip" crossorigin="anonymous"></script>
</head>
<body>
<nav class="navbar navbar-dark navbar-expand-lg navbar-light bg-primary" >
  <div class="container-fluid">
    <a class="navbar-brand" href="#">SYSTECH GROUP </a>
    <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarNavAltMarkup" aria-controls="navbarNavAltMarkup" aria-expanded="false" aria-label="Toggle navigation">
      <span class="navbar-toggler-icon"></span>
    </button>
    <div class="collapse navbar-collapse" id="navbarNavAltMarkup">
      <div class="navbar-nav">
        <a class="nav-link active" aria-current="page" href="#">VIEW</a>
        <a class="nav-link" href="#">UPDATE</a>
        <a class="nav-link" href="#">ADMIN</a>
      </div>
    </div>
  </div>
</nav>
{% block body_block %}
{% endblock %}
</body>
</html>

```

## 9. Verify the result.



```
<!DOCTYPE html>
{% extends 'appfile/index.html' %}
{% block body_block %}
<html>
<head>
<title>Student Informations</title>
</head>
<body>
<center>
<h1>STUDENTS INFORMATION</h1>
{% if s %}
<table border=2px;>
<thead>
<th >NO</th>
<th >NAME</th>
<th >AGE</th>
<th >CITY</th>
<th >MOBILE</th>
<th >DEPARTMENT</th>
<th >FEES</th>
</thead>
{% for x in s %}
<tr >
<td >{{x.sno}}</td>
<td> {{x.sname}}</td>
<td >{{x.age}}</td>
<td >{{x.city}}</td>
<td> {{x.mobile}}</td>
<td >{{x.dep}}</td>
<td >{{x.fees}}</td>
</tr>
{% endfor %}
</table>
{% else %}
<p>NO RECORDS FOUND</p>
{% endif %}
</center>
</body>
{% endblock %}
</html>
```

## 11. Create Insert.html file

```
insert.html
<!DOCTYPE html>
{% extends 'appfile/index.html' %}
{% block body_block %}
<html>

<head>
    <title>INSERT RECORD</title>
</head>
<center>
<body>
<h2 >INSERT STUDENT INFORMATION</h2>
<form method="POST" style="text-align: center;">
    {{f.as_p}}
    {%csrf_token%}
    <input type="submit" value="SUBMIT">
</form>
</body>
</center>
{% endblock %}
</html>
```

## 12. Create submit.html file

```
submit.html
<!DOCTYPE html>
{% extends 'appfile/index.html' %}
{% block body_block %}
<head>
    <title>LAST PAGE</title>
</head>

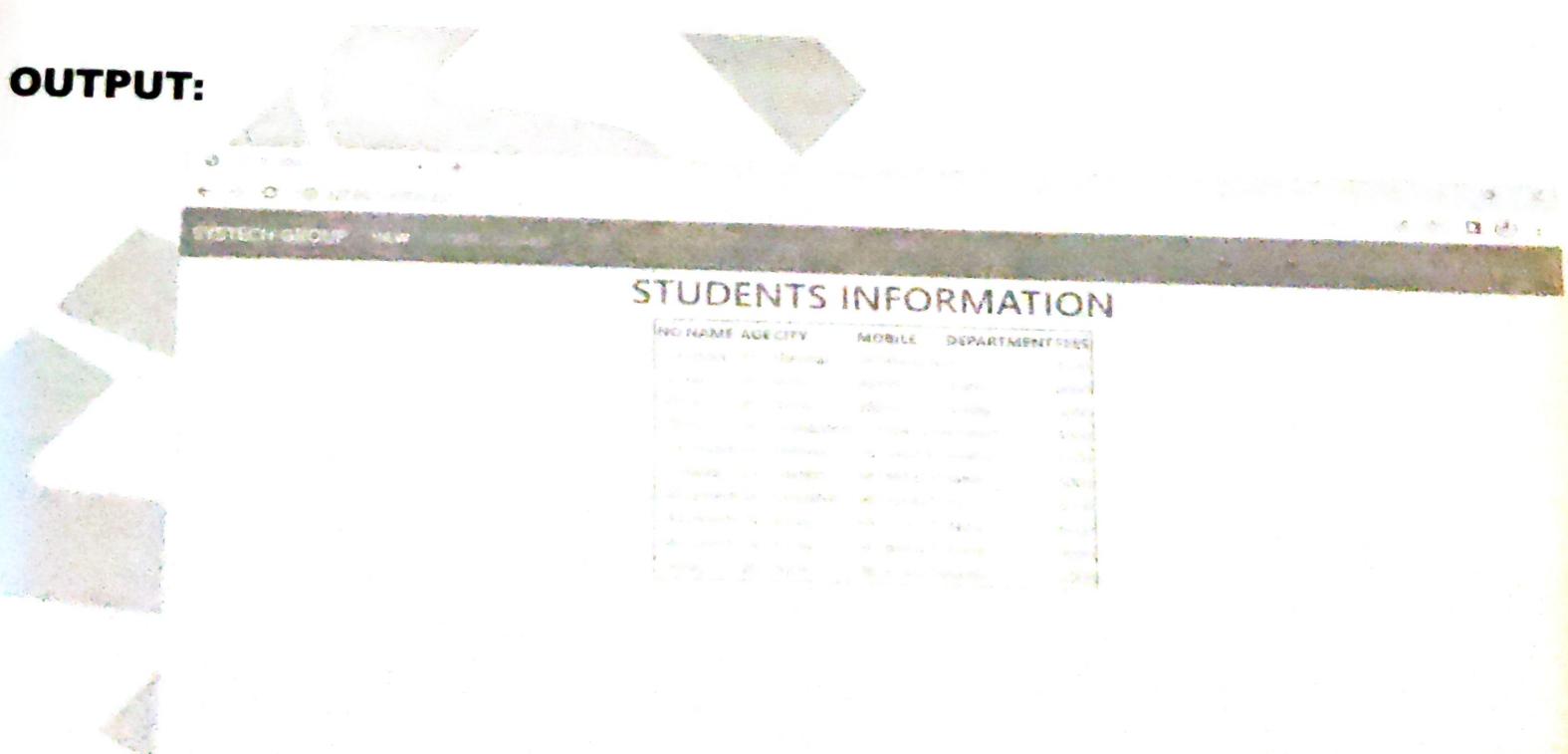
<center>
<body>
<h2 >----- STUDENT DATA STORED SUCCESSFULLY -----</h2>
</body>
</center>
{% endblock %}
</html>
```

13. Add all html page in index file.

```
index.html
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js"
integrity="sha384-ka7Sk0Gln4gmtz2MlQnKtTtwXgYs0g+OMhuP+TlRH9sENB00Rn5q+8nb1ov4+ip" crossorigin="anonymous"></script>
</head>
<body>
<nav class="navbar navbar-dark navbar-expand-lg navbar-light bg-primary">
  <div class="container-fluid">
    <a class="navbar-brand" href="#">SYSTECH GROUP </a>
    <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarNavAltMarkup" aria-controls="navbarNavAltMarkup" aria-expanded="false" aria-label="Toggle navigation">
      <span class="navbar-toggler-icon"></span>
    </button>
    <div class="collapse navbar-collapse" id="navbarNavAltMarkup">
      <div class="navbar-nav">
        <a class="nav-link active" aria-current="page" href="/info">VIEW</a>
        <a class="nav-link" href="/insert">UPDATE</a>
        <a class="nav-link" href="/admin">ADMIN</a>
      </div>
    </div>
  </div>
</nav>
{% block body_block %}

{% endblock %}
</body>
</html>
```

## **OUTPUT:**



## WEB DEVELOPMENT

File Edit View Insert Student Information

Name:

Date:

Address:

Mobile:

Dep:

Fees:



Django administration

Username:

Password:

## 2. PROJECT : CREATE A PROJECT WITH TEMPLATE INHERITENCE

### 1. Create a Project and Application

```
C:\Windows\system32\cmd.exe
D:\Django>django-admin startproject webproject1
D:\Django>cd webproject1
D:\Django\webproject1>python manage.py startapp webapps
D:\Django\webproject1>_
```

### 2. Add Application and Template name in Settings file.

```
settings.py

from pathlib import Path
import os
# Build paths inside the project like this: BASE_DIR / 'subdir'.
BASE_DIR = Path(__file__).resolve().parent.parent
T_dir = os.path.join(BASE_DIR, 'templates')

# Quick-start development settings - unsuitable for production
# See https://docs.djangoproject.com/en/4.0/howto/deployment/checklist/

# SECURITY WARNING: keep the secret key used in production secret!
#SECRET_KEY = 'django-insecure-satqjilnok@8sym&b6g#)h(0()we6zpkv^vc!lc=^4%y#b&v%'

# SECURITY WARNING: don't run with debug turned on in production!
DEBUG = True

ALLOWED_HOSTS = []

# Application definition

INSTALLED_APPS = [
    'django.contrib.admin',
    'django.contrib.auth',
    'django.contrib.contenttypes',
    'django.contrib.sessions',
    'django.contrib.messages',
    'django.contrib.staticfiles',
    'webapps'
]

MIDDLEWARE = [
    'django.middleware.security.SecurityMiddleware',
    'django.middleware.common.BrokenLinkEmailsMiddleware',
    'django.middleware.csrf.CsrfViewMiddleware',
    'django.middleware.clickjacking.XFrameOptionsMiddleware',
    'django.contrib.auth.middleware.AuthenticationMiddleware',
    'django.contrib.messages.middleware.MessageMiddleware',
    'django.middleware.clickjacking.XFrameOptionsMiddleware',
]

ROOT_URLCONF = 'webproject1.urls'

TEMPLATES = [
    {
        'BACKEND': 'django.template.backends.django.DjangoTemplates',
        'DIRS': [T_dir],
        'APP_DIRS': True,
        'OPTIONS': {
            'context_processors': [
                'django.template.context_processors.debug',
                'django.template.context_processors.request',
                'django.contrib.auth.context_processors.auth',
                'django.contrib.messages.context_processors.messages',
            ],
        },
    },
]
```

### 3. Configure Views file.

views.py

```
from django.shortcuts import render

def home(request):
    return render(request, 'apps/index.html')
```

### 4. Configure Url file.

urls.py

```
"""webproject1 URL Configuration
```

The `urlpatterns` list routes URLs to views. For more information please see:  
<https://docs.djangoproject.com/en/4.0/topics/http/urls/>

Examples:

Function views

1. Add an import: from my\_app import views

2. Add a URL to urlpatterns: path('', views.home, name='home')

Class-based views

1. Add an import: from other\_app.views import Home

2. Add a URL to urlpatterns: path('', Home.as\_view(), name='home')

Including another URLconf

1. Import the include() function: from django.urls import include, path

2. Add a URL to urlpatterns: path('blog/', include('blog.urls'))

```
from django.contrib import admin
from django.urls import path
from webapps import views
```

```
urlpatterns = [
    path('admin/', admin.site.urls),
    path('index/', views.home)
]
```

### 5. Run the server.

## WEB DEVELOPMENT

```
C:\Windows\system32\cmd.exe - python manage.py runserver
D:\Django\webproject1>python manage.py runserver
Watching for file changes with StatReloader
Performing system checks...
System check identified no issues (0 silenced).
You have 18 unapplied migration(s). Your project may not work properly until you apply the migrations for app(s): admin, auth, contenttypes, sessi
ons.
Run 'python manage.py migrate' to apply them.
April 13, 2022 - 14:16:44
Django version 4.0.3, using settings 'webproject1.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
```

### 6. Verify in browser.



## Create index.html page.

```
<!DOCTYPE html>
<html>
<head >
    <title>SYSTECH GROUP</title>
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-1BmE4kWBq78iYhFdvKuhFTAU6auU8tT94WhHftjDbrCEXSUlo8oqy...z" crossorigin="anonymous">
    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js" integrity="sha384-ka7Sk0Gln4gmtz2MlQnikT1wXgYsOg+OMhuP+IlRH9sEN800LRn5q+8nbTov4+ip" crossorigin="anonymous"></script>
<nav class="navbar navbar-dark bg-dark">
    <div class="container-fluid">
        <a class="navbar-brand" href="/index">SYSTECH GROUP</a>
        <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle navigation">
            <span class="navbar-toggler-icon"></span>
        </button>
        <div class="collapse navbar-collapse" id="navbarNav">
            <ul class="navbar-nav">
                <li class="nav-item">
                    <a class="nav-link active" aria-current="page" href="/home">Home</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="/service">Services</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="/gallery">Gallery</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="/contact">Contact Us</a>
                </li>
            </ul>
        </div>
    </div>
</nav>
</head>
<body style="background-color: #a6ffff">
    <h1 style="text-align: center; size: 20; color: red">WELCOME TO SYSTECH GROUP </h1>
</body>
<footer style="position: fixed; padding: 10px 10px 0px 10px; bottom: 0; width: 100%; height: 40px; background: #36353b">
    <a href="http://www.systechgroup.in" style="text-align: right; font-size: large; color: white">www.systechgroup.in</a>
</footer>
{%
    block body_block %
}
{%
    endblock %
}
</html>
```

## 8. Create **home.html** page.

```
home.html
<!DOCTYPE html>
{% extends 'apps/index.html' %}
{%block body_block %}
<html>
<head>
    <title>home page</title>
</head>
<body style="background-color: red">
<main>
    <h1 style="color: red;font-size: xx-large;font-family: arial">Hi Everyone </h1>
    <p style="color: blue;font-size: x-Large;text-align: justify;">Systech is a leading Training and Placement company in Trichy. We are known for our practical approach towards training that enables students to gain real-time exposure to competitive technologies. Training is offered by employees from MNCs to give real corporate exposure to the students.</p>
    <article>
        <h2 style="color: green;font-size: xx-large;font-family: arial">DJANGO WEB DEVELOPMENT COURSE</h2>
        <p style="color: blue;font-size: x-Large;text-align: justify;">Django is a Web Development course provided by systech Trichy. It is the best framework for developing a Web application framework in Python programming language. Django follows Model View Template (MVT) Architecture which is based on the Model View Controller(MVC) Architecture. The demand for Django remains is high at all times because of its fast development feature. It can be used to build any type of website and web application.</p>
    </article>
</main>
</body>
{%endblock%}
</html>
```

## 9. Configure **Services.html** page.

```
services.html
<!DOCTYPE html>
{% extends 'apps/index.html' %}
{%block body_block %}
<html>
<head >
    <h1 style="color: #3a41fc;text-align: center;">
        <b>TRAINING COURSES</b>
    </h1>
    <h2 style="color: black;text-align: center">100% PRACTICAL TRAINING</h2>
</head>
<style>
    p1 {
        color:green;text-indent: 30px;text-align: center;
        font-family: 'Times New Roman', Times, serif;font-size: xx-large;
    }
</style>
<body >
    <p1>DJANGO<hr>PYTHON<hr>C<hr>C++<hr>SQL<hr>HTML<hr>CSS<hr></p1>
</body>
{%endblock%}
</html>
```

## 10. Configure **Gallery.html** page

```
gallery.html
<!DOCTYPE html>
{% extends 'apps/index.html' %}
{%block body_block %}
<html>
<head>
    <h1 style="color: #0000ff;text-align: center;">
        <b>OUR GALLERY</b>
    </h1>
</head>

<body>
    <h3 style="text-align: center;color: black">.....Images are soon to be upload.....</h3>
</body>
{%endblock%}
</html>
```

## 11. Configure **contact.html** page.

```
contact.html
<!DOCTYPE html>
{% extends 'apps/index.html' %}
{%block body_block %}
<html>
<head>
    <title>CONTACT</title>
</head>
<body>
    <br><br><br><br><br><br><br><br>
    <b><p style="color:red;"><u>CONTACT:</u></p></b>
<b style="text-align: center;"><address>Aruvi block,<br>
    St.paul's complex,<br>
    Bharathiyan salai,<br>
    Cantonment,<br>
    Trichy-01.</address></b><br>
</body>
{%endblock%}
</html>
```

## WEB DEVELOPMENT

### 12. Configure Views file

```
views.py
from django.shortcuts import render

def index(request):
    return render(request, 'apps/index.html')

def home(request):
    return render(request, 'apps/home.html')

def service(request):
    return render(request, 'apps/services.html')

def gallery(request):
    return render(request, 'apps/gallery.html')

def contact(request):
    return render(request, 'apps/contact.html')
```

### 13. Configure url file.

```
urls.py
"""webproject1 URL Configuration

The `urlpatterns` list routes URLs to views. For more information please see:
    https://docs.djangoproject.com/en/4.0/topics/http/urls/
Examples:
Function views
    1. Add an import: from my_app import views
    2. Add a URL to urlpatterns: path('', views.home, name='home')
Class-based views
    1. Add an import: from other_app.views import Home
    2. Add a URL to urlpatterns: path('', Home.as_view(), name='home')
Including another URLconf
    1. Import the include() function: from django.urls import include, path
    2. Add a URL to urlpatterns: path('blog/', include('blog.urls'))
"""

from django.contrib import admin
from django.urls import path
from webapps import views

urlpatterns = [
    path('admin/', admin.site.urls),
    path('index/', views.index),
    path('home/', views.home),
    path('service/', views.service),
    path('gallery/', views.gallery),
    path('contact/', views.contact)
]
```

#### 14. Run the server.

```
C:\Windows\system32\cmd.exe - python manage.py runserver  
d:\Django\webproject1>python manage.py runserver  
Watching for file changes with StatReloader  
Performing system checks...  
  
System check identified no issues (0 silenced).  
  
You have 18 unapplied migration(s). Your project may not work properly until you apply the migrations  
ons.  
Run 'python manage.py migrate' to apply them.  
April 13, 2022 - 19:43:58  
Django version 4.0.3, using settings 'webproject1.settings'  
Starting development server at http://127.0.0.1:8000/  
Quit the server with CTRL-BREAK.
```

#### OUTPUT:

WELCOME TO SYSTECH GROUP

## WEB DEVELOPMENT

Python, Java, C/C++, .NET

SYSTECH GROUP

### WELCOME TO SYSTECH GROUP

#### Our Services

Systech Group offers a wide range of IT services including software development, system integration, consulting, maintenance, support, and training. We have a team of experienced professionals who are dedicated to providing high-quality solutions to our clients.

#### DRANGO WEB DEVELOPMENT COURSE

Django Web Development course provided by Systech Group is the best framework for developing a web application. It is used in Python, Java, C/C++, .NET, and other programming languages. The demand for Django developers is high in the current market. If you want to learn how to build a dynamic website or web application,

www.systechgroup.in

SYSTECH GROUP

### WELCOME TO SYSTECH GROUP

#### TRAINING COURSES

100% PRACTICAL TRAINING

DRANGO

PYTHON



SQL

HTML

CSS

www.systechgroup.in

## WEB DEVELOPMENT

SEARCH

# WELCOME TO SYSTECH GROUP OUR GALLERY

.....Images are soon to be upload.....

[www.systechgroup.in](http://www.systechgroup.in)

SYSTECH GROUP

# WELCOME TO SYSTECH GROUP

CONTACT

Araval block,  
St. paul's complex,  
Bharathiyar salai  
Cantonment,  
Tiruchy-61.

### 3. PROJECT : CREATE A PROJECT WITH TEMPLATE INHERITENCE

#### 1. Create a Project and Application

```
C:\Windows\system32\cmd.exe
D:\Django>django-admin startproject webproject2
D:\Django>cd webproject2
D:\Django\webproject2>python manage.py startapp webapps
D:\Django\webproject2>
```

#### 2. Add Application and Template name in Settings file.

```
settings.py
from pathlib import Path
import os
# Build paths inside the project like this: BASE_DIR / 'subdir'.
T_Dir = os.path.join(BASE_DIR, 'templates')
# Quick-start development settings - unsuitable for production
# See https://docs.djangoproject.com/en/4.0/howto/deployment/checklist/
SECRET_KEY = 'django-insecure-11nfu4il+i$5$!8dm4zx&a_8"=%v)tebq8^7&k&(9pkvem'
# SECURITY WARNING: don't run with debug turned on in production!
DEBUG = True
ALLOWED_HOSTS = []

# Application definition
INSTALLED_APPS = [
    'django.contrib.admin',
    'django.contrib.auth',
    'django.contrib.contenttypes',
    'django.contrib.sessions',
    'django.contrib.messages',
    'django.contrib.staticfiles',
    'webapps'
]

MIDDLEWARE = [
    'django.middleware.security.SecurityMiddleware',
    'django.contrib.sessions.middleware.SessionMiddleware',
    'django.middleware.common.CommonMiddleware',
    'django.middleware.csrf.CsrfViewMiddleware',
    'django.contrib.auth.middleware.AuthenticationMiddleware',
    'django.contrib.messages.middleware.MessageMiddleware',
    'django.middleware.clickjacking.XFrameOptionsMiddleware',
]

ROOT_URLCONF = 'webproject2.urls'

TEMPLATES = [
    {
        'BACKEND': 'django.template.backends.django.DjangoTemplates',
        'DIRS': [T_Dir],
        'APP_DIRS': True,
        'OPTIONS': {
            'context_processors': [
                'django.template.context_processors.debug',
                'django.template.context_processors.request',
                'django.contrib.auth.context_processors.auth',
                'django.contrib.messages.context_processors.messages',
            ],
        },
    },
]
```

3. Create **home.html** page.

```
home.html
-----
<!DOCTYPE html>
{% extends 'apps/index.html' %}
{%block body_block %}
<html>
<head>
    <title>home page</title>
</head>
<body style="background-color: red">
<main>
    <h1 style="color: red;font-size: xx-large;font-family: arial">Hi Everyone <h1>
    <p style="color: blue;font-size: x-large;text-align: justify;">Systech is a leading Training Development and Placement company in Trichy. We are known for our practical approach towards training that enables students to gain real-time exposure to competitive technologies. Training is offered by employees from MNCs to give real corporate exposure to the students.</p>
    <article>
        <h2 style="color: green;font-size: xx-large;font-family: arial">DJANGO WEB DEVELOPMENT COURSE</h2>
        <p style="color: blue;font-size: x-large;text-align: justify;">Django is a Web Development course provided by systech Trichy. It is the best framework for developing a Web application framework in Python programming language. Django follows Model View Template (MVT) Architecture which is based on the Model View Controller(MVC) Architecture. The demand for Django remains is high at all times because of its fast development feature. It can be used to build any type of website and web application.</p>
    </article>
</main>
</body>
{%endblock%}
</html>
```

4. Configure **Gallery.html** page

```
gallery.html
-----
<!DOCTYPE html>
{% extends 'apps/index.html' %}
{%block body_block %}
<html>
<head>
    <h1 style="color: #3a41fc;text-align: center;">
        <b>OUR GALLERY</b>
    </h1>
</head>

<body>
    <h3 style="text-align: center;color: black">.....Images are soon to be upload.....</h3>
    <br>
</body>
{%endblock%}
</html>
```

----- WEB DEVELOPMENT -----

5. Configure **contact.html** page.

```
contact.html      x
<!DOCTYPE html>
{% extends 'apps/index.html' %}
{%block body_block %}
<html>
<head>
    <title>CONTACT</title>
</head>
<body>
    <br><br><br><br><br><br><br><br>
    <b><p style="color:red;"><u>CONTACT:</u></p></b>
<b style="text-align: center;"><address>Aruvi block,<br>
    St.paul's complex,<br>
    Bharathiyan salai,<br>
    Cantonment,<br>
    Trichy-01.</address></b><br>
</body>
{%endblock%}
</html>
```

6. Configure **Views** file.

```
views.py      x
from django.shortcuts import render
def index(request):
    return render(request,'apps/index.html')
def home(request):
    return render(request,'apps/home.html')
def service(request):
    return render(request,'apps/services.html')
def gallery(request):
    return render(request,'apps/gallery.html')
def contact(request):
    return render(request,'apps/contact.html')
```

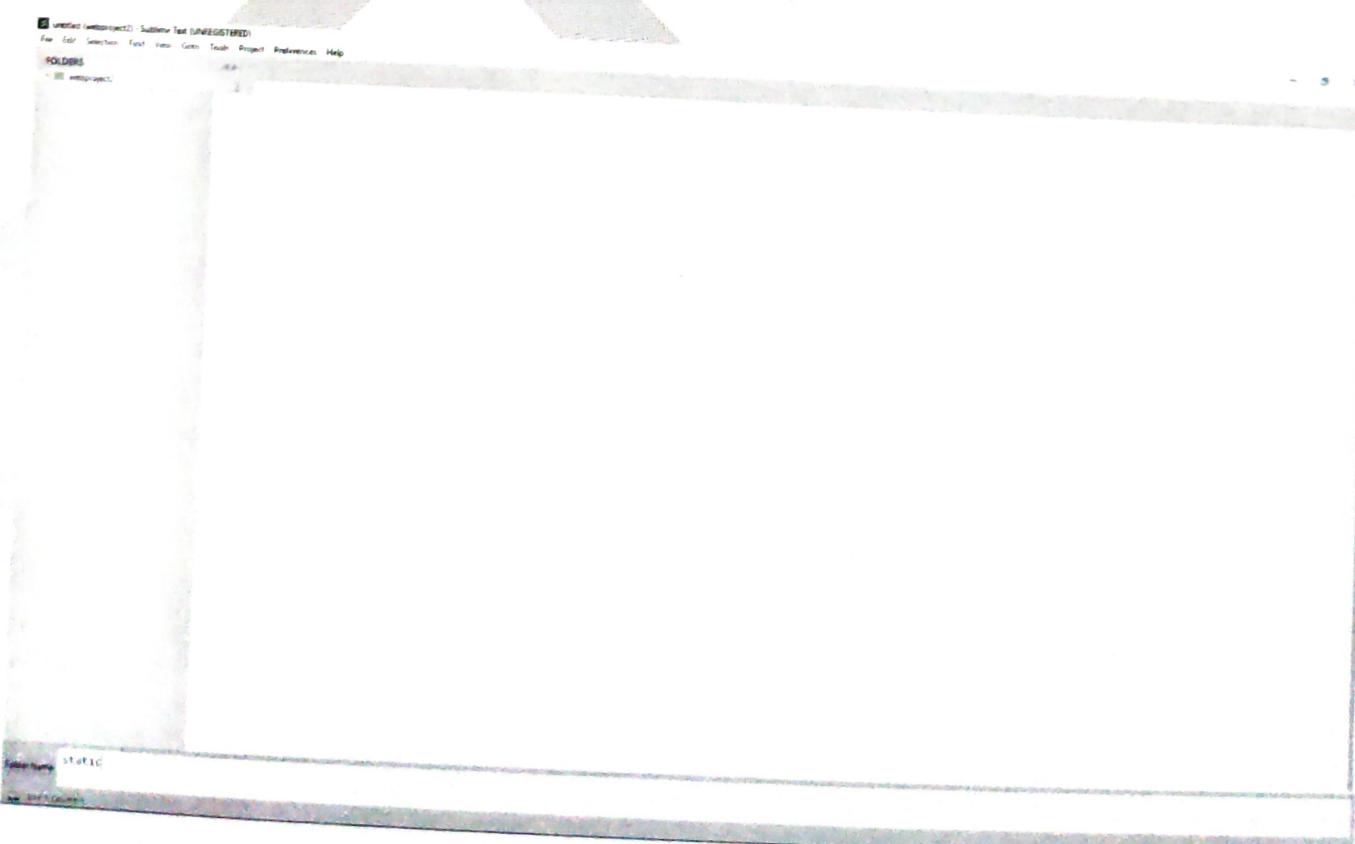
## 7. Configure Url file.

```
uris.py
=====
# This is the main URL configuration for your project. It lists routes and their corresponding views.

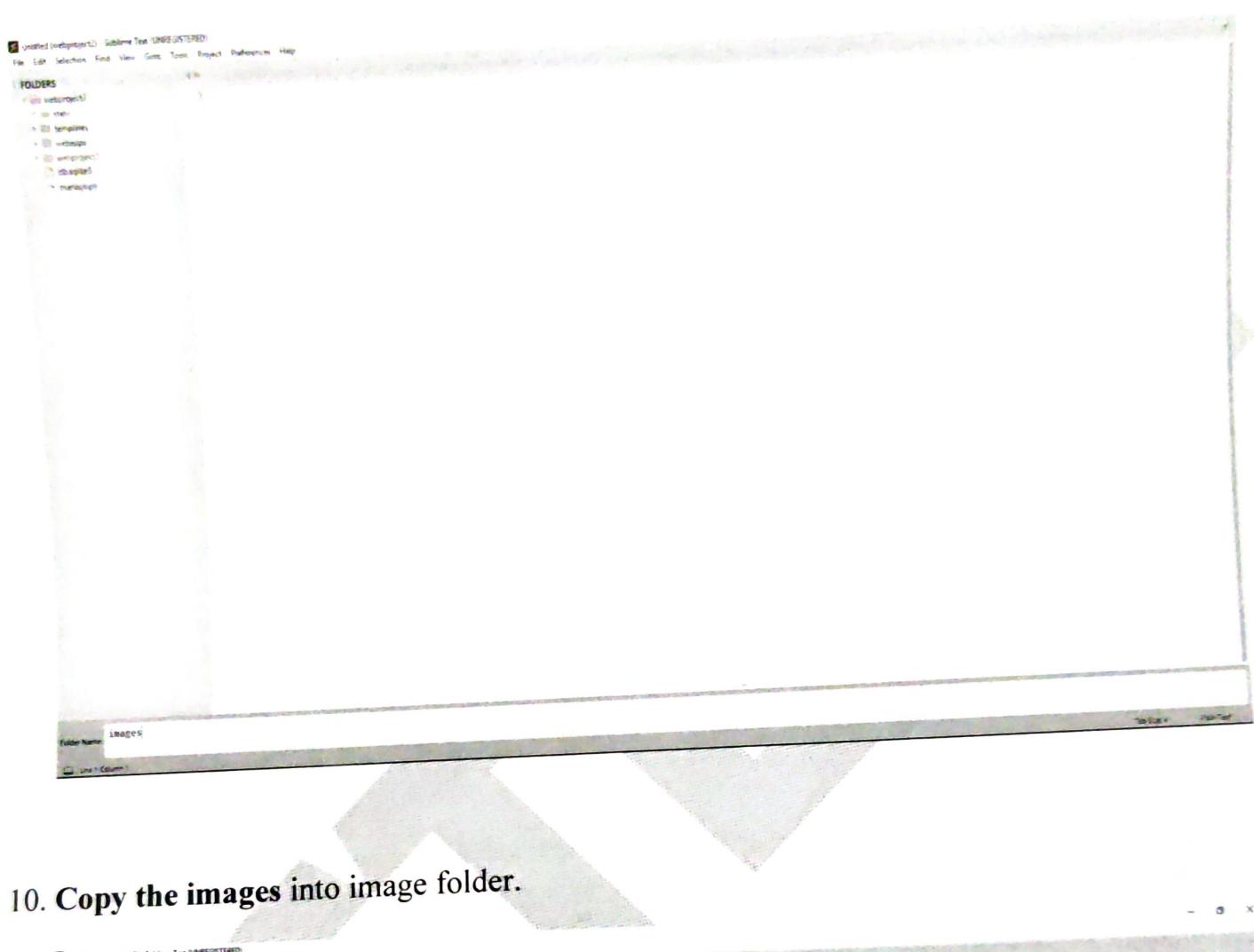
# The urlpatterns list routes URLs to views. For more information please see:
# https://docs.djangoproject.com/en/4.0/topics/http/urls/
# Examples:
# Function views
# 1. Add an import: from my_app import views
# 2. Add a URL to urlpatterns: path('', views.home, name='home')
# Class based views
# 1. Add an import: from other_app.views import Home
# 2. Add a URL to urlpatterns: path('', Home.as_view(), name='home')
# Including another URLconf
# 1. Import the include() function: from django.urls import include, path
# 2. Add a URL to urlpatterns: path('blog/', include('blog.urls'))
from django.contrib import admin
from django.urls import path
from webapps import views

urlpatterns = [
    path('admin/', admin.site.urls),
    path('index/',views.index),
    path('home/',views.home),
    path('service/',views.service),
    path('gallery/',views.gallery),
    path('contact/',views.contact)
]
```

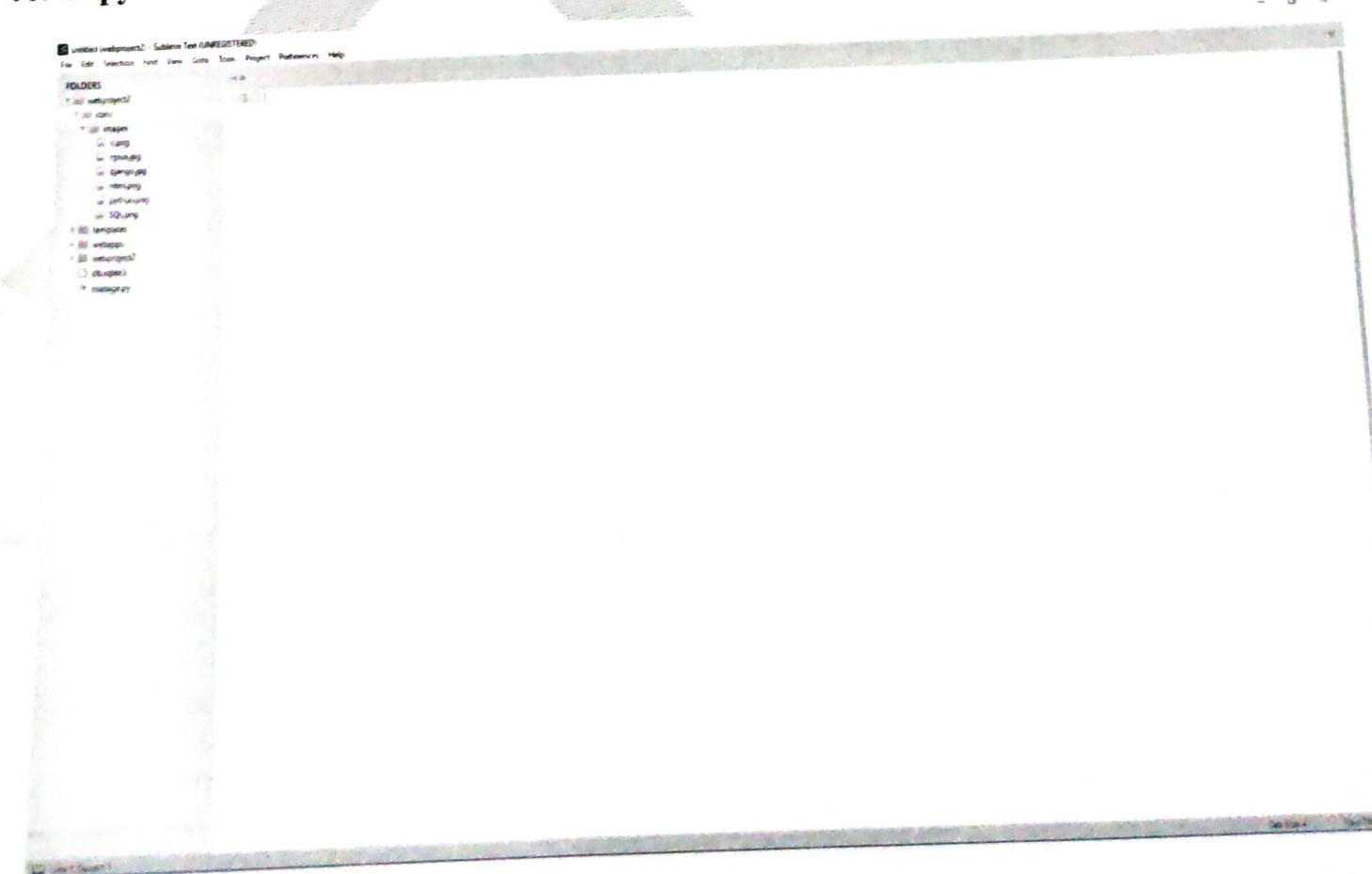
## 8. Create Static folder.



## 9. Create Image folder.



## 10. Copy the images into image folder.



## 11. Add Static directory in Settings file

```

settings.py

from pathlib import Path
import os
# Build paths inside the project like this: BASE_DIR / 'subdir'.
BASE_DIR = Path(__file__).resolve().parent.parent
T_Dir=os.path.join(BASE_DIR,'templates')
Static_dir=os.path.join(BASE_DIR,'static')
# Quick-start development settings - unsuitable for production
# See https://docs.djangoproject.com/en/4.0/howto/deployment/checklist/

# SECURITY WARNING: keep the secret key used in production secret!
SECRET_KEY = 'django-insecure-l1^nfuw4il+i$5$!8dmi#zx&%a_8*-%v)tebq8^7&lc(9playem'

# SECURITY WARNING: don't run with debug turned on in production!
DEBUG = True

ALLOWED_HOSTS = []

```

```

settings.py

STATIC_URL = 'static/'
STATICFILES_DIRS=[Static_dir
]

# Default primary key field type
# https://docs.djangoproject.com/en/4.0/ref/settings/#default-auto-field
DEFAULT_AUTO_FIELD = 'django.db.models.BigAutoField'

```

## 12. Add images in gallery.html file.

```

gallery.html

{% extends 'apps/index.html' %}
{% load static %}
{%block body_block %}

<html>

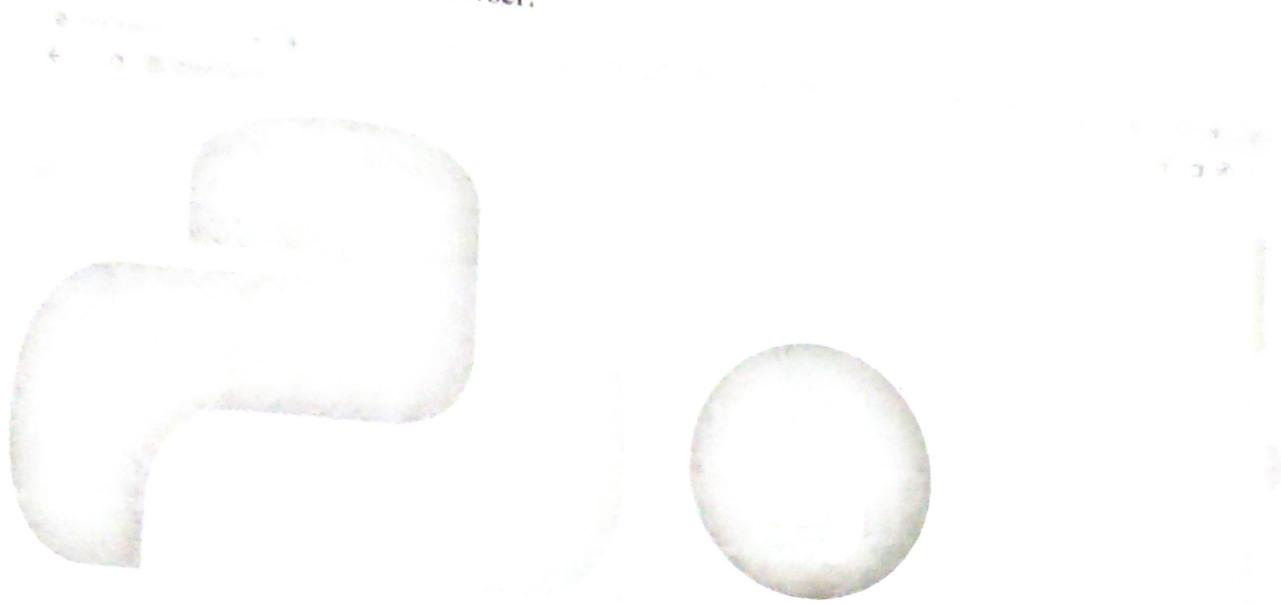
<head >
    <h1 style="color: #3a41fc;text-align: center;">
        <b>OUR GALLERY</b>
    </h1>
</head>

<body >
    
    
    
    
    
    
</body>
{%endblock%}
</html>

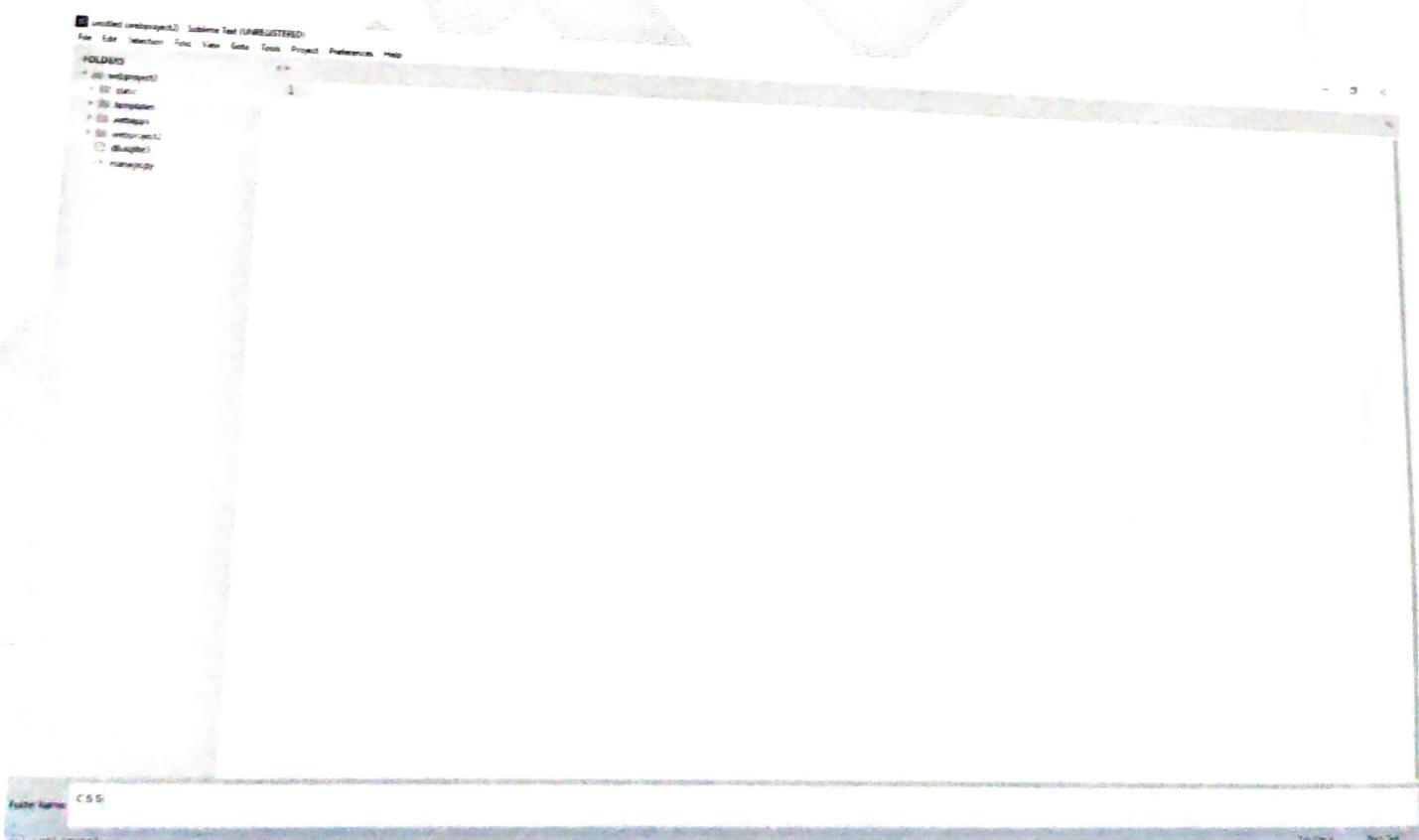
```

## WEB DEVELOPMENT

13. Verify the gallery page in browser.

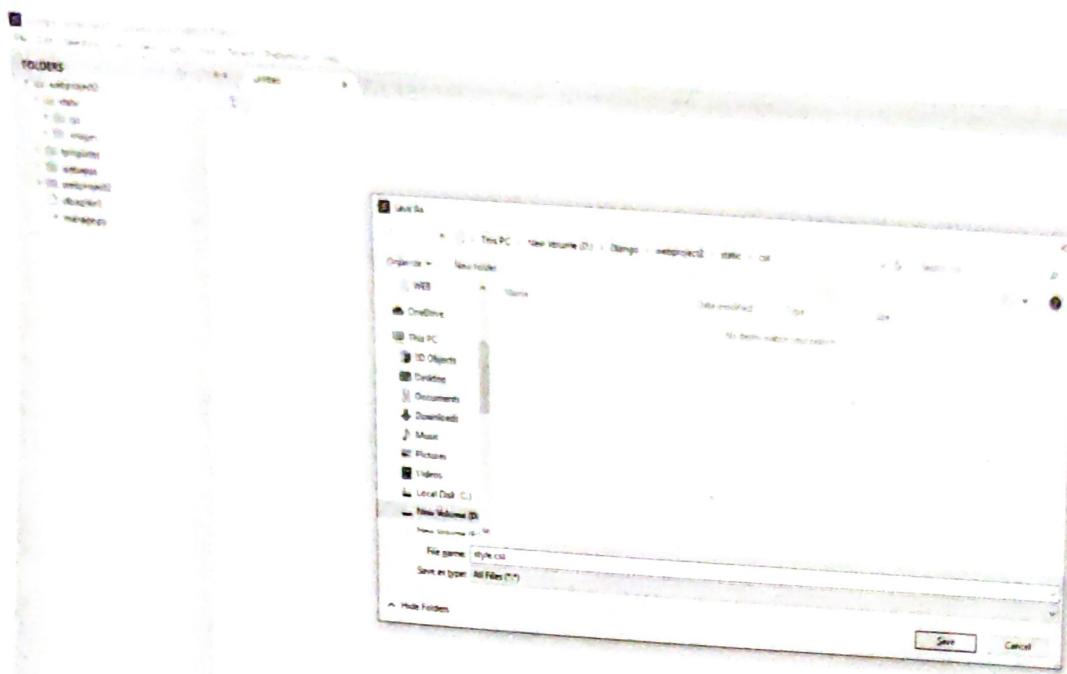


14. Create Css folder.



## WEB DEVELOPMENT

### 15. Create style.css file.



### 16. Type commands.

style.css

x

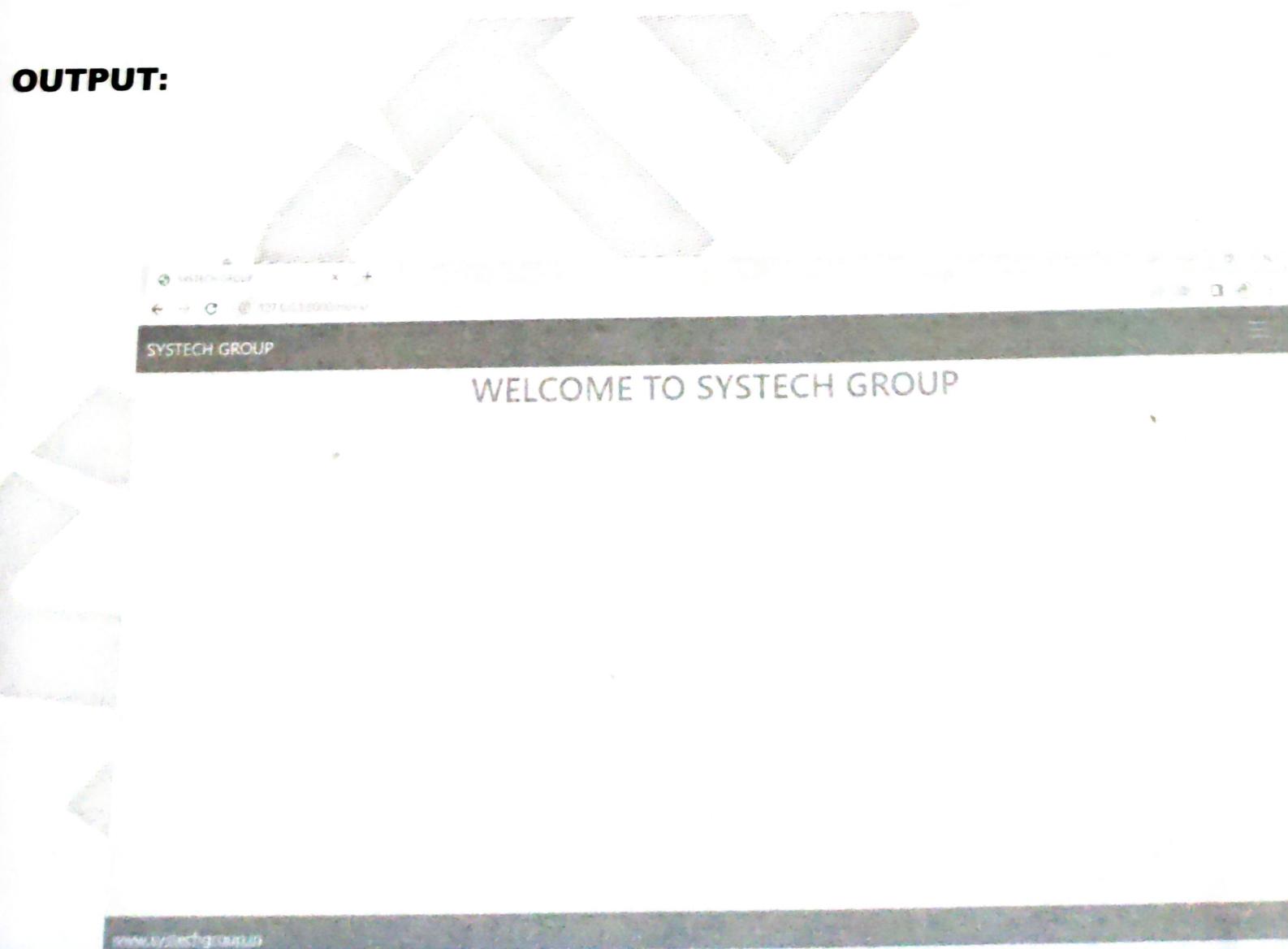
```
img{  
    border: solid 5px;  
    border-color: #a6fffe;  
    width: 20%;  
    height: 20%;  
}
```

## 17. Add css link in gallery page.

```
gallery.html
 *
{% extends 'apps/index.html' %}
{% load static %}
{%block body_block %}
<html>
<link rel="stylesheet" href="{%static "css/style.css" %}">
<head>
    <h1 style="color: #3a41fc; text-align: center;">
        <b>OUR GALLERY</b>
    </h1>
</head>

<body>
    
    
    
    
    
    
</body>
{%endblock%}
</html>
```

## OUTPUT:



WEB DEVELOPMENT

DATA SCIENCE  
ML & AI  
BLOCKCHAIN

WELCOME TO SYSTECH GROUP  
TRAINING COURSES  
100% PRACTICAL TRAINING

DRANGO

PYTHON

C/C++

C#

SQL

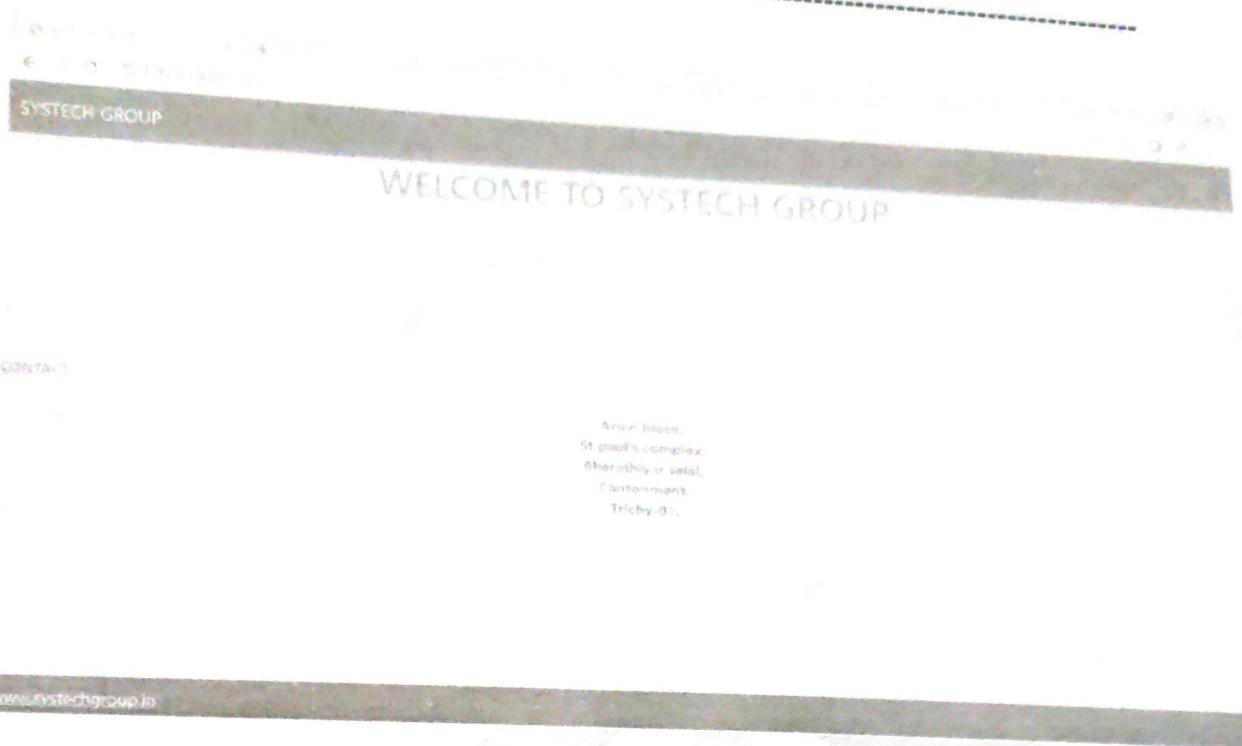
HTML

[www.systechgroup.in](http://www.systechgroup.in)

WELCOME TO SYSTECH GROUP  
OUR GALLERY



## WEB DEVELOPMENT



## 4. PROJECT : CREATE A PROJECT WITH TEMPLATE INHERITANCE

### 1. Create a Project and Application

```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 10.0.16299.1087]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\systech>d:

D:\>cd Django

D:\Django>django-admin startproject webproject3

D:\Django>cd webproject3

D:\Django\webproject3>python manage.py startapp webapps

D:\Django\webproject3>
```

## 2. Add Application and Template name in Settings file.

```

from pathlib import Path
import os
# Build paths inside the project like this: BASE_DIR / 'subdir'
BASE_DIR = Path(__file__).resolve().parent.parent
BASE_DIR = Path(__file__).resolve().parent.parent
T_dir=os.path.join(BASE_DIR,'templates')
Static_dir=os.path.join(BASE_DIR,'static')
# Quick start development settings - unsuitable for production
# See https://docs.djangoproject.com/en/4.0/howto/deployment/checklist/
# SECURITY WARNING: keep the secret key used in production secret!
SECRET_KEY = 'django-insecure-1i0xa7n5-hyz-x4n1-hulyen1%fc1glvdnvv=)3sfszcx&@ln)'
# SECURITY WARNING: don't run with debug turned on in production!
DEBUG = True

ALLOWED_HOSTS = []

# Application definition

INSTALLED_APPS = [
    'django.contrib.admin',
    'django.contrib.auth',
    'django.contrib.contenttypes',
    'django.contrib.sessions',
    'django.contrib.messages',
    'django.contrib.staticfiles',
    'webapps'
]

```

```

TEMPLATES = [
    {
        'BACKEND': 'django.template.backends.django.DjangoTemplates',
        'DIRS': [T_dir],
        'APP_DIRS': True,
        'OPTIONS': {
            'context_processors': [
                'django.template.context_processors.debug',
                'django.template.context_processors.request',
                'django.contrib.auth.context_processors.auth',
                'django.contrib.messages.context_processors.messages',
            ],
        },
    },
]

```

```
--- DEVELOPMENT ---  
STATIC_URL = 'static/'  
STATICFILES_DIRS=[Static_dir]  
]  
# Default primary key field type  
# https://docs.djangoproject.com/en/4.0/ref/settings/#default-auto-field  
DEFAULT_AUTO_FIELD = 'django.db.models.BigAutoField'
```

### 3. Create database in model file

```
models.py  
from django.db import models  
class Student(models.Model):  
    no=models.IntegerField()  
    name=models.CharField(max_length=64)  
    mobile=models.IntegerField()  
    city=models.CharField(max_length=100)  
    course=models.CharField(max_length=100)
```

### 4. Configure admin file

```
admin.py  
from django.contrib import admin  
from webapps.models import Student  
class StudentAdmin(admin.ModelAdmin):  
    list_display=['no','name','mobile','city','course']  
admin.site.register(Student,StudentAdmin)
```

## ----- WEB DEVELOPMENT -----

### 5. Type command: **python manage.py makemigrations**

#### **Python manage.py migrate**

```
C:\Windows\system32\cmd.exe

D:\Django\webproject3>python manage.py makemigrations
Migrations for 'webapps':
  webapps\migrations\0001_initial.py
    - Create model Student

D:\Django\webproject3>python manage.py migrate
Operations to perform:
  Apply all migrations: admin, auth, contenttypes, sessions, webapps
Running migrations:
  Applying contenttypes.0001_initial... OK
  Applying auth.0001_initial... OK
  Applying admin.0001_initial... OK
  Applying admin.0002_logentry_remove_auto_add... OK
  Applying admin.0003_logentry_add_action_flag_choices... OK
  Applying auth.0002.Alter_permission_name_max_length... OK
  Applying auth.0003.Alter_user_email_max_length... OK
  Applying auth.0004.Alter_user_username_opts... OK
  Applying auth.0005.Alter_user_last_login_null... OK
  Applying auth.0006.Require_contenttypes_0002... OK
  Applying auth.0008.Alter_user_username_max_length... OK
  Applying auth.0009.Alter_user_last_name_max_length... OK
  Applying auth.0010.Alter_group_name_max_length... OK
  Applying auth.0011.Update_proxy_permissions... OK
  Applying auth.0012.Alter_user_first_name_max_length... OK
  Applying sessions.0001_initial... OK
  Applying webapps.0001_initial... OK
```

### 6. Type command: **python manage.py createsuperuser.**

```
C:\Windows\system32\cmd.exe

D:\Django\webproject3>python manage.py createsuperuser
Username (leave blank to use 'systech'): admin
Email address: admin@gmail.com
Password:
Password (again):
This password is too short. It must contain at least 8 characters.
This password is too common.
This password is entirely numeric.
Bypass password validation and create user anyway? [y/N]: y
Superuser created successfully.
```

D:\Django\webproject3>

## 7. Create forms.py

```
forms.py
from django import forms
from webapps.models import Student
class StudentForm(forms.ModelForm):
    class Meta:
        model=Student
        fields='__all__'
```

## 8. Create Views file

```
views.py
from django.shortcuts import render,redirect
from webapps.models import Student
from webapps.forms import StudentForm
def read(request):
    student=Student.objects.all()
    return render(request,'apps/result.html',{'e':student})
def insert(request):
    form=StudentForm()
    if request.method=="POST":
        form=StudentForm(request.POST)
        if form.is_valid():
            form.save()
    return render(request,'apps/insert.html',{'form':form})
def delete(request,id):
    e=Student.objects.get(id=id)
    e.delete()
    return redirect('/result')
def update(request,id):
    student=Student.objects.get(id=id)
    if request.method=="POST":
        form=StudentForm(request.POST, instance=student)
        if form.is_valid():
            form.save()
    return redirect('/result')
return render(request,'apps/update.html',{'e':student})
```

```

views.py
def delete(request, id):
    e=Student.objects.get(id=id)
    e.delete()
    return redirect('/result')
def update(request, id):
    student=Student.objects.get(id=id)
    if request.method=="POST":
        form=StudentForm(request.POST, instance=student)
        if form.is_valid():
            form.save()
    return redirect('/result')
def index(request):
    return render(request,'apps/update.html',{'e':student})
def home(request):
    return render(request,'apps/index.html')
def service(request):
    return render(request,'apps/home.html')
def gallery(request):
    return render(request,'apps/services.html')
def contact(request):
    return render(request,'apps/gallery.html')

```

## 9. Create url file

```

urls.py
from django.contrib import admin
from django.urls import path
from webapps import views
urlpatterns = [
    path('admin/', admin.site.urls),
    path('result/', views.read),
    path('insert/', views.insert),
    path('delete/<int:id>', views.delete),
    path('update/<int:id>', views.update),
    path('index/',views.index),
    path('home/',views.home),
    path('service/',views.service),
    path('gallery/',views.gallery),
    path('contact/',views.contact)
]

```

## WEB DEVELOPMENT

### 10. Create index.html page.

```
<!DOCTYPE html>
<html>
<head>
    <title>SYSTECH GROUP</title>
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel="stylesheet"
        integrity="sha384-1BmE4kWBQJiEEoQZyCnqOYcQhWxjGzHdIyOvD+PjBZl3nqXqKg=" crossorigin="anonymous">
    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js" integrity="sha384-k7fQ4LCWL+S0uH9qK9jXuOOGQFQDwzGQDqB64+tp" crossorigin="anonymous"></script>
<nav class="navbar navbar-dark bg-dark">
    <div class="container-fluid">
        <a class="navbar-brand" href="/index">SYSTECH GROUP</a>
        <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarSupportedContent"
            aria-controls="navbarSupportedContent" aria-expanded="false" aria-label="Toggle navigation">
            <span class="navbar-toggler-icon"></span>
        </button>
        <div class="collapse navbar-collapse" id="navbarSupportedContent">
            <ul class="navbar-nav">
                <li class="nav-item">
                    <a class="nav-link active" aria-current="page" href="/home">Home</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="/service">Services</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="/gallery">Gallery</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="/contact">Contact Us</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="/insert">REGISTER</a>
                </li>
            </ul>
        </div>
    </div>
</nav>
</head>
<body style="background-color: #ff9e7a">
    <h1 style="text-align: center; size: 20px; color: #1e40ba">WELCOME TO SYSTECH GROUP </h1>
<footer style="position: fixed; padding: 10px 10px 0px 10px; bottom: 0; width: 100%; height: 40px; background-color: #363636; color: white">
    <a href="http://www.systechgroup.in" style="text-align: right; font-size: large; color: white">
        www.systechgroup.in
    </a>
</footer>
{% block body_block %}
{% endblock %}
</body>
```

## 11. Create home.html page.

```
home.html
<!DOCTYPE html>
{% extends 'apps/index.html' %}
{%block body_block %}
<html>
<body style="background-color: red">
<main>
    <h1 style="color: red;font-size: xx-large;font-family: arial">Hi Everyone </h1>
    <p style="color: blue;font-size: x-large;text-align: justify;">Systech is a leading Training
Development and Placement company in Trichy. We are known for our practical approach towards training
that enables students to gain real-time exposure to competitive technologies. Training is offered by
employees from MNCs to give real corporate exposure to the students.</p>
    <h2 style="color: green;font-size: xx-large;font-family: arial">DJANGO WEB DEVELOPMENT COURSE</h2>
    provided by systech Trichy. It is the best framework for developing a Web application framework in
    Python programming language. Django follows Model View Template (MVT) Architecture which is based on
    the Model View Controller(MVC) Architecture. The demand for Django remains is high at all times
    because of its fast development feature. It can be used to build any type of website and web
    application.</p>
</article>
</main>
</body>
{%endblock%}
</html>
```

## 12. Create services.html file

```
services.html
<!DOCTYPE html>
{% extends 'apps/index.html' %}
{%block body_block %}
<html>
<head >
    <h1 style="color: #3a41fc;text-align: center;">
        <b>TRAINING COURSES</b>
    </h1>
    <h2 style="color: black;text-align: center">100% PRACTICAL TRAINING</h2>
</head>
<style>
    p1 {
        color:green;text-indent: 30px;text-align: center;
        font-family: 'Times New Roman', Times, serif;font-size: xx-large;
    }
</style>
<body >
    <p1>DJANGO<hr>PYTHON<hr>C<hr>C++<hr>SQL<hr>HTML<hr>CSS<hr></p1>
</body>
{%endblock%}
</html>
```

### 13. Create gallery.html file

```
gallery.html
{% extends 'apps/index.html' %}
{% load static %}
{%block body_block %}
<html>
<link rel="stylesheet" href="{%static "css/style.css" %}">
<head>
    <h1 style="color: #3a41fc;text-align: center;">
        <b>OUR GALLERY</b>
    </h1>
</head>

<body>
    
    
    
    
    
    
</body>
{%endblock%}
</html>
```

### 14. Create contact.html file.

```
contact.html
<!DOCTYPE html>
{% extends 'apps/index.html' %}
{%block body_block %}
<html>
<head>
    <title>CONTACT</title>
</head>
<body>
    <br><br><br><br><br><br><br><br>
    <b><p style="color:red;"><u>CONTACT:</u></p></b>
<b style="text-align: center;"><address>Aruvi block,<br>
    St.paul's complex,<br>
    Bharathiyan salai,<br>
    Cantonment,<br>
    Trichy-01.</address></b><br>
</body>
{%endblock%}
</html>
```

## 15. Create **insert.html** page.

```
Insert.html
<!DOCTYPE html>
{% extends 'apps/index.html' %}
{%block body_block %}
<html>
<center>
<body>
<h2 style="color: red">INSERT ENQUIRY INFORMATION</h2>
<form method="POST" style="color: blue">
    {{form.as_p}}
    {%csrf_token%}
    <input type="submit" value="SUBMIT">
</form>
</body>
</center>
{%endblock%}
</html>
```

## 16. Create **result.html** page.

```
result.html
<!DOCTYPE html>
{% extends 'apps/index.html' %}
{%block body_block %}
<html><style>
    table{
        border-collapse: collapse;
        width: 100%;
    }
    th, td {
        padding: 5px;
        text-align: center;
        border-bottom: 1px solid black;
    }
    th {
        background-color: #f2f2f2;
        color: black;
    }
    tr:hover {
        background-color: #f2f2f2;
    }
</style><center><body>
<h2 style="text-align: center; color: red">Employee Details</h2>
<table border='1'>
<thead>
    <tr>
        <th>NO</th>
        <th>NAME</th>
        <th>MOBILE</th>
        <th>CITY</th>
        <th>COURSE</th>
        <th>Actions</th>
    </tr>
<%for i in e%>
<tr>
    <td>{{i.no}}</td>
    <td>{{i.name}}</td>
    <td>{{i.mobile}}</td>
    <td>{{i.city}}</td>
    <td>{{i.course}}</td>
    <td><a href="/update/{{ i.id }}">Update</a> | <a href="/delete/{{ i.id }}">Delete</a></td>
</tr>
<%endfor%>
</table></body></center>
{%endblock%}</html>
```

## 17. Create update.html page.

```
update.html
<!DOCTYPE html>
{% extends 'apps/index.html' %}
{%block body_block %}
<html>
<center>
<body>
<h2 style="color: red">UPDATE INFORMATION</h2>
<form method="POST" style="color: blue">
    {%csrf_token%}
    NO: <input type="text" name="no" value="{{e.no}}><br>
    NAME: <input type="text" name="name" value="{{e.name}}><br>
    MOBILE: <input type="text" name="mobile" value="{{e.mobile}}><br>
    CITY: <input type="text" name="city" value="{{e.city}}><br>
    COURSE: <input type="text" name="course" value="{{e.course}}><br>

    <input type="submit" value="UPDATE">
</form>
</body>
</center>
{%endblock%}
</html>
```

## 18. Run the server.

```
C:\Windows\system32\cmd.exe - python manage.py runserver
D:\Django\webproject3>python manage.py runserver
Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).
April 25, 2022 - 16:39:52
Django version 4.0.3, using settings 'webproject3.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
```

**UTPUT:**

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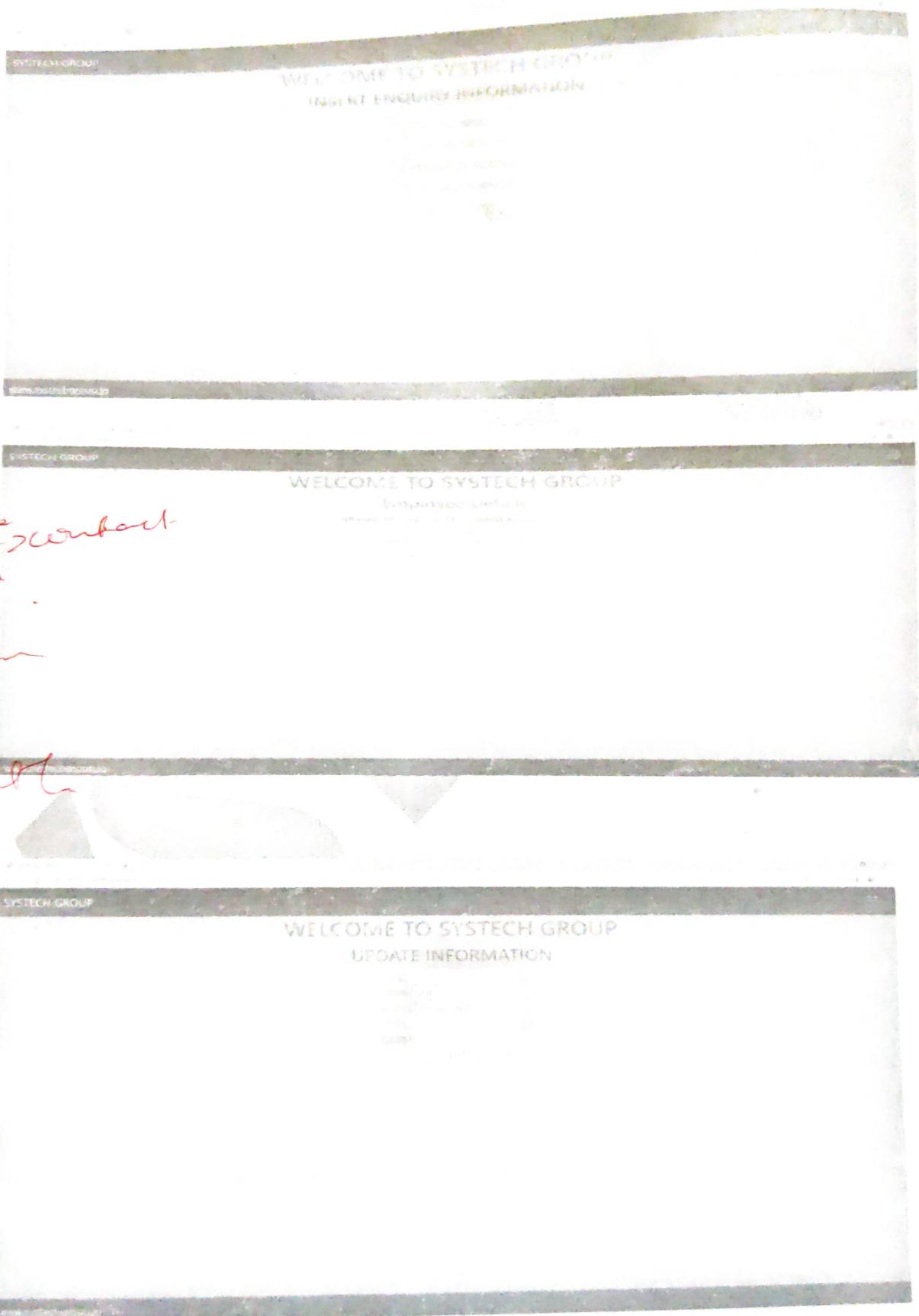
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## WEB DEVELOPMENT



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