**Base.HTMl[App Dir / Templates Dir]**

<!DOCTYPE html>

<html lang="en">

<head>

{% load static %}

<meta charset="UTF-8" name="viewport" content="width=device-width, initial-scale=1"/>

<link rel="stylesheet" type="text/css" href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"/>

<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js" integrity="sha384-MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/tWtIaxVXM" crossorigin="anonymous"></script>

</head>

<body>

    <div class="container">

        <header>

            <h1>Python Django Integrate with Mysql CRUD</h1>

        </header>

        <hr>

        <main>

            {% block body %}

            {% endblock %}

        </main>

        <hr>

    </div>

<script src="https://cdn.jsdelivr.net/npm/jquery@3.6.0/dist/jquery.min.js"></script>

<script src="{% static 'js/script.js' %}"></script>

</body>

</html>

**Edit.html[APP Dir /Templates Dir]**

{% extends 'base.html' %}

{% block body %}

    <form>

        {% csrf\_token %}

        <input type="hidden" id="member\_id" value="{{ member.id }}"/>

        <div class="mb-3">

            <label>Firstname</label>

            <input type="text" id="firstname" value="{{ member.firstname }}" class="form-control" required="required"/>

        </div>

        <div class="mb-3">

            <label>Lastname</label>

            <input type="text" id="lastname" value="{{ member.lastname }}" class="form-control" required="required"/>

        </div>

        <div class="mb-3">

            <button type="button" id="update" class="btn btn-warning">Update</button>

        </div>

    </form>

{% endblock %}

**Index.html[App Dir/ Templates Dir]**

{% extends 'base.html' %}

{% block body %}

<form class="form-inline">

    {% csrf\_token %}

    <div class="mb-3">

        <label>Firstname</label>

        <input type="text" id="firstname" class="form-control" style="width:30%;" required="required"/>

    </div>

    <div class="mb-3">

        <label>Lastname</label>

        <input type="text" id="lastname" class="form-control" style="width:30%;" required="required"/>

    </div>

    <div class="mb-3">

        <button type="button" id="create" class="btn btn-primary">Create</button>

    </div>

</form>

<br />

<div id="result"></div>

{% endblock %}

**Script.js[App Dir / static Dir]**

//myapp/static/js/script.js

$(document).ready(function(){

    if($('#result') != null){

        Read();

    }

    $('#create').on('click', function(){

        $firstname = $('#firstname').val();

        $lastname = $('#lastname').val();

        if($firstname == "" || $lastname == ""){

            alert("Please complete the required field");

        }else{

            $.ajax({

                url: 'create/',

                type: 'POST',

                data: {

                    firstname: $firstname,

                    lastname: $lastname,

                    csrfmiddlewaretoken: $('input[name=csrfmiddlewaretoken]').val()

                },

                success: function(){

                    Read();

                    $('#firstname').val('');

                    $('#lastname').val('');

                    alert("New Member Successfully Added");

                }

            });

        }

    });

    $(document).on('click', '.edit', function(){

        $id = $(this).attr('name');

        window.location = "edit/" + $id;

    });

    $('#update').on('click', function(){

        $firstname = $('#firstname').val();

        $lastname = $('#lastname').val();

        if($firstname == "" || $lastname == ""){

            alert("Please complete the required field");

        }else{

            $id = $('#member\_id').val();

            $.ajax({

                url: 'update/' + $id,

                type: 'POST',

                data: {

                    firstname: $firstname,

                    lastname: $lastname,

                    csrfmiddlewaretoken: $('input[name=csrfmiddlewaretoken]').val()

                },

                success: function(){

                    window.location = '/';

                    alert('Updated!');

                }

            });

        }

    });

    $(document).on('click', '.delete', function(){

        $id = $(this).attr('name');

        $.ajax({

            url: 'delete/' + $id,

            type: 'POST',

            data: {

                csrfmiddlewaretoken: $('input[name=csrfmiddlewaretoken]').val()

            },

            success: function(){

                Read();

                alert("Deleted!");

            }

        });

    });

});

function Read(){

    $.ajax({

        url: 'read/',

        type: 'POST',

        async: false,

        data:{

            res: 1,

            csrfmiddlewaretoken: $('input[name=csrfmiddlewaretoken]').val()

        },

        success: function(response){

            $('#result').html(response);

        }

    });

}

**Models.py[APP Directory]**

from django.db import models

class Member(models.Model):

    firstname = models.CharField(max\_length=50)

    lastname = models.CharField(max\_length=50)

    class Meta:

        db\_table = "tbl\_member"

**views.py[App Directory]**

from django.shortcuts import render, redirect

from hp3\_app.models import Member

# Create your views here.

def index(request):

    return render(request, 'index.html')

def create(request):

    member = Member(firstname=request.POST['firstname'], lastname=request.POST['lastname'])

    member.save()

    return redirect('/')

def read(request):

    members = Member.objects.all()

    context = {'members': members}

    return render(request, 'result.html', context)

def edit(request, id):

    members = Member.objects.get(id=id)

    context = {'member': members}

    return render(request, 'edit.html', context)

def update(request, id):

    member = Member.objects.get(id=id)

    member.firstname = request.POST['firstname']

    member.lastname = request.POST['lastname']

    member.save()

    return redirect('/')

def delete(request, id):

    member = Member.objects.get(id=id)

    member.delete()

    return redirect('/')

**settings.py[Project Directory]**

DATABASES = {

    'default': {

        'ENGINE': 'django.db.backends.mysql',

        'NAME': 'django',

        'USER': 'root',

        'PASSWORD': '',

        'HOST': 'localhost',

        'PORT': '3306'

    }

}

INSTALLED\_APPS = [

    'django.contrib.admin',

    'django.contrib.auth',

    'django.contrib.contenttypes',

    'django.contrib.sessions',

    'django.contrib.messages',

    'django.contrib.staticfiles',

    'hp3\_app',

]

DATABASES = {

    'default': {

        'ENGINE': 'django.db.backends.mysql',

        'NAME': 'django',

        'USER': 'root',

        'PASSWORD': '',

        'HOST': 'localhost',

        'PORT': '3306'

    }

}

**Urls.py[Project Directory]**

from django.contrib import admin

from django.urls import path

from hp3\_app import views

urlpatterns = [

    path('admin/', admin.site.urls),

    path('', views.index, name='index'),

    path('create/',views.create, name='create'),

    path('read/',views.read, name='read'),

    path('edit/<id>',views.edit, name='edit'),

    path('edit/update/<id>',views.update, name='update'),

    path('delete/<id>',views.delete, name='delete'),

]

**Required Commands:**

1. python –m venv venv
2. venv\Script\activate
3. pip install django==3.2
4. pip install sqlclient
5. xampp 🡪start[mysql, phpmyadmin]
6. create 🡪dbname in mysql
7. python manange.py runserver

**Note[Other Commands]**

python manage.py makemigrations

python manage.py migrate