

# MediTrack

## Vaccination Management System



# Team Members



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# Introduction



## Purpose:

Track vaccinations, send SMS reminders, and ensure data security at the same time.



## Target:

Facilitate Users  
(Parents/People with Child)



## Key Features:

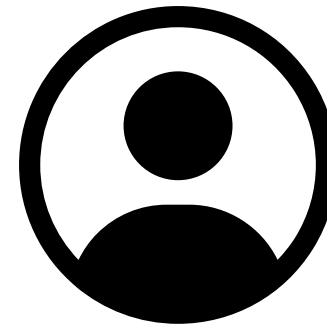
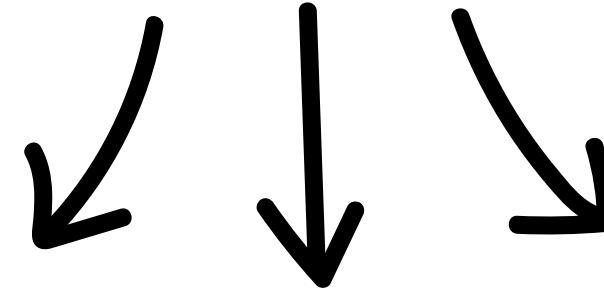
- Role-based Access (Only for Admin(Superuser))
- SMS Reminders

## How the System Works?

**Admin**



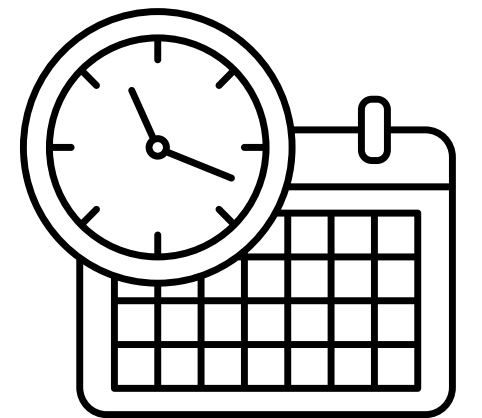
Manages (View/Add/Delete)



**Users**



**Vaccinations**



**Appointments**

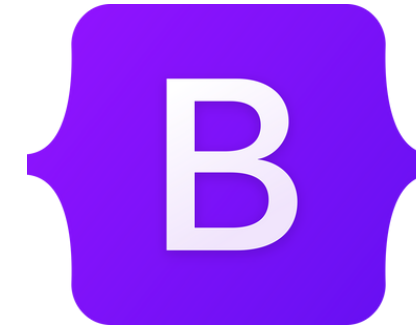
## Tools Used in This Project

- IDE (Integrated Development Environment)



# Tech Stack

- Frontend



- Backend



- Database



# Initial Steps

- Installed Python, Python interpreter, and Django using the command: `pip install django`.
- Initialized a new Django project named VaccineMgmt using the command: `django-admin startproject VaccineMgmt`.
- Navigated into the project directory and created a new app named vaccine using the command: `python manage.py startapp vaccine`.
- Opened the project folder in PyCharm for development.
- Started the development server using the command: `python manage.py runserver`.

# MVT in Django

- Model handles data.
- View handles logic.
- Template handles presentation.



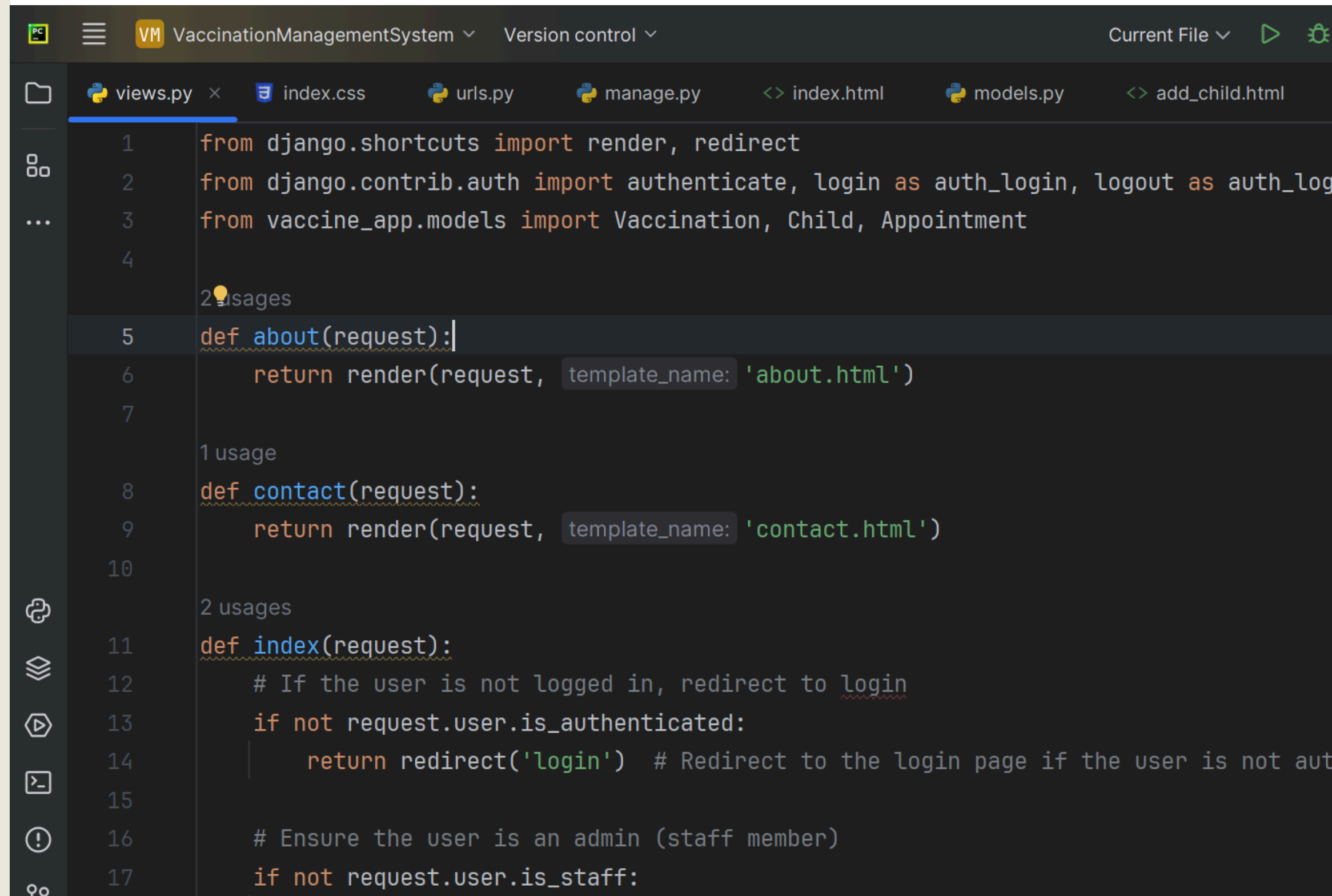
# models.py

- Where we define the structure of our database tables using Python classes.

```
1 from django.db import models
2 from datetime import time
3
4 class Child(models.Model):
5     full_name = models.CharField(max_length=100)
6     date_of_birth = models.DateField()
7     gender = models.CharField(max_length=10)
8     parent_name = models.CharField(max_length=100)
9     contact_number = models.CharField(max_length=20)
10    email = models.EmailField(blank=True, null=True)
11    address = models.CharField(max_length=200)
12    medical_notes = models.CharField(max_length=200, blank=True)
13
```

# views.py

- Contains the functions or classes that handle what happens when a user visits a specific URL.



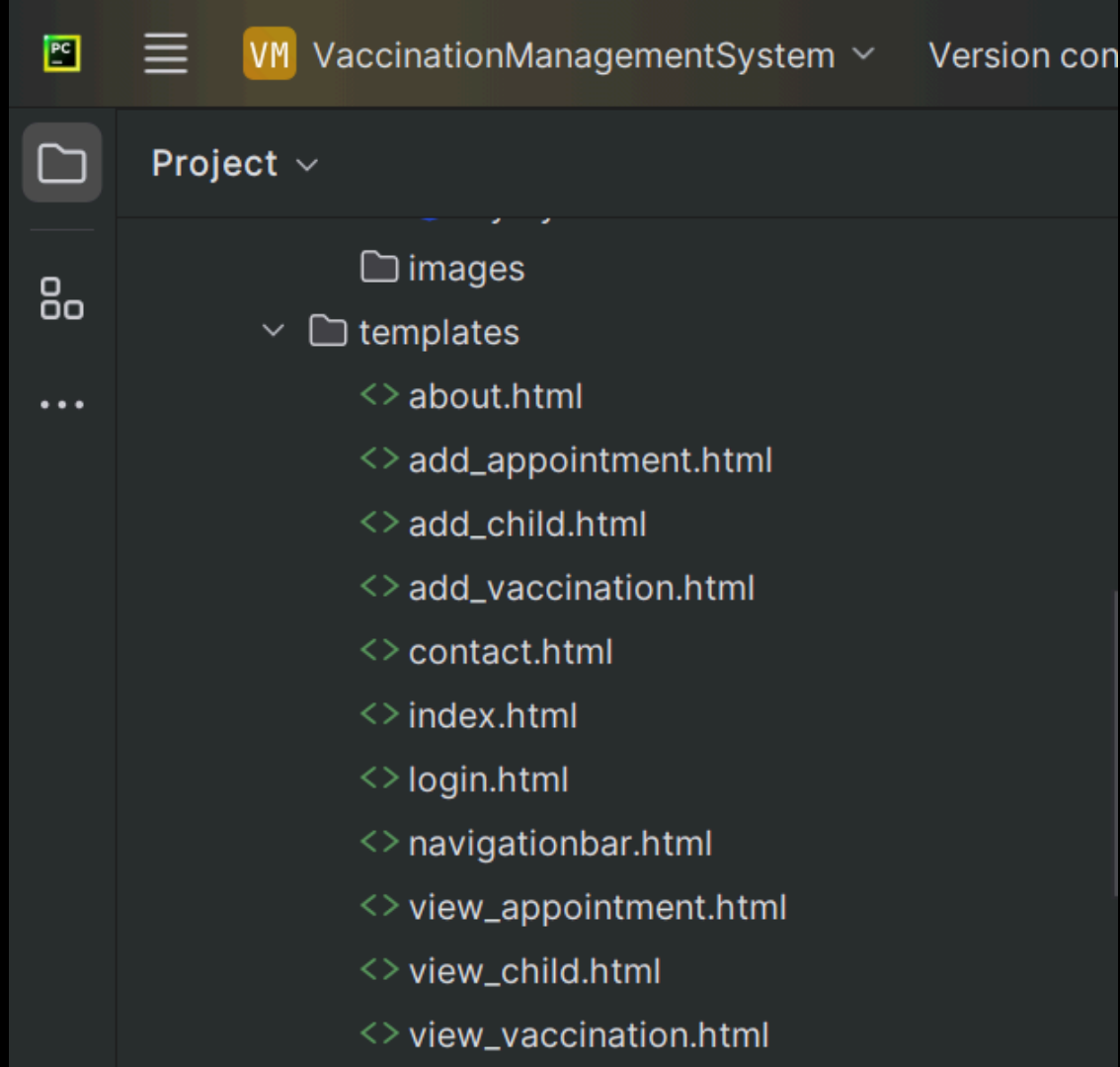
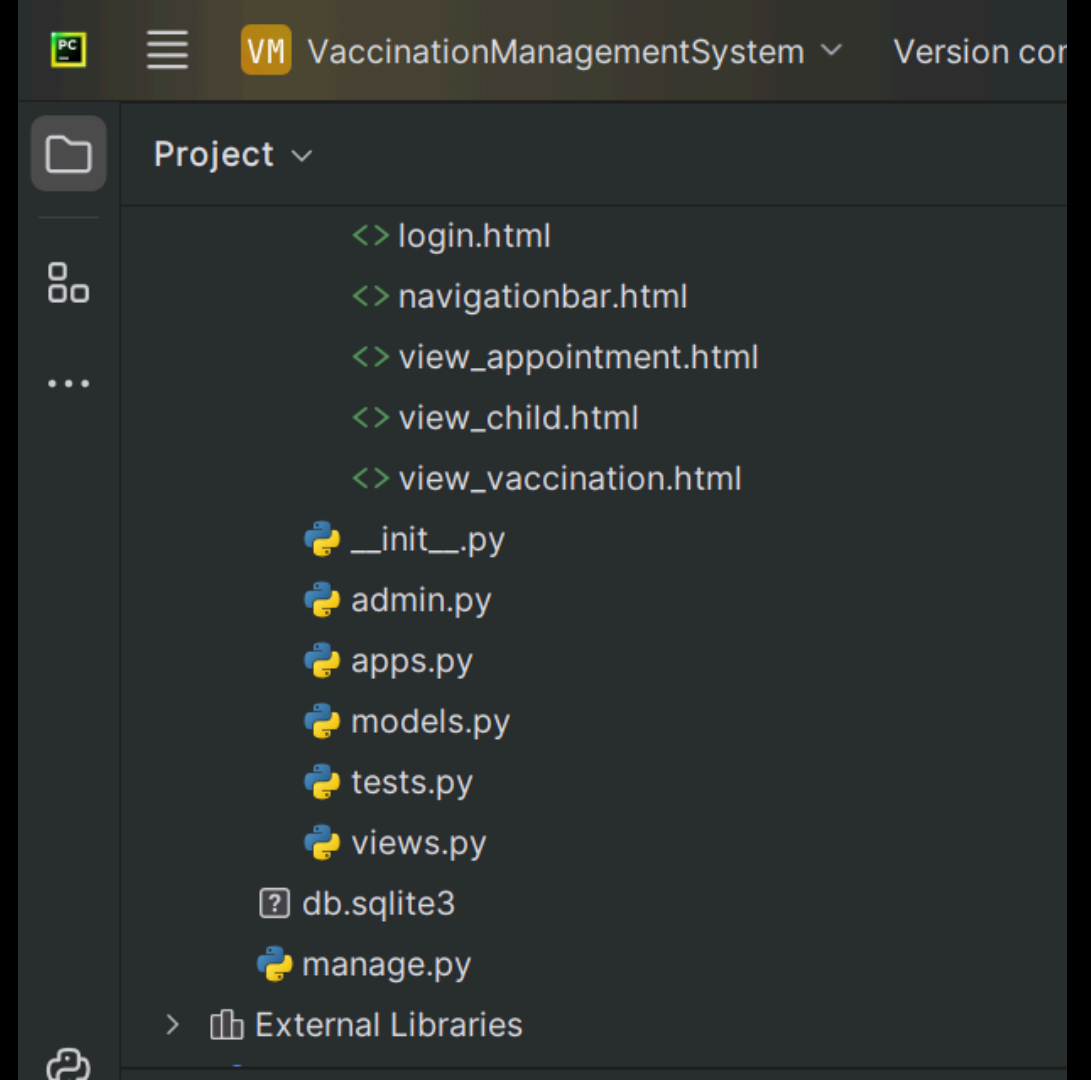
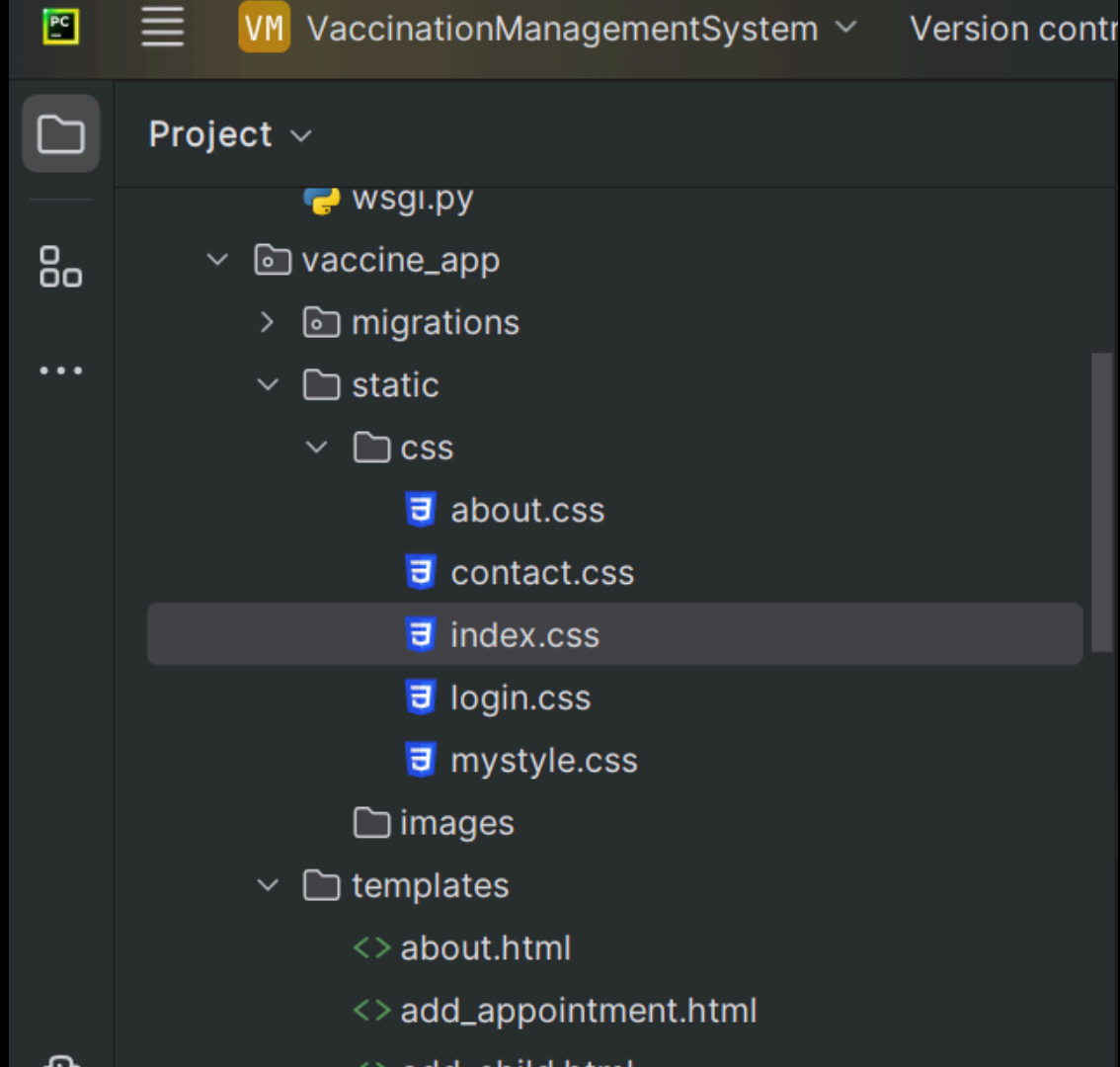
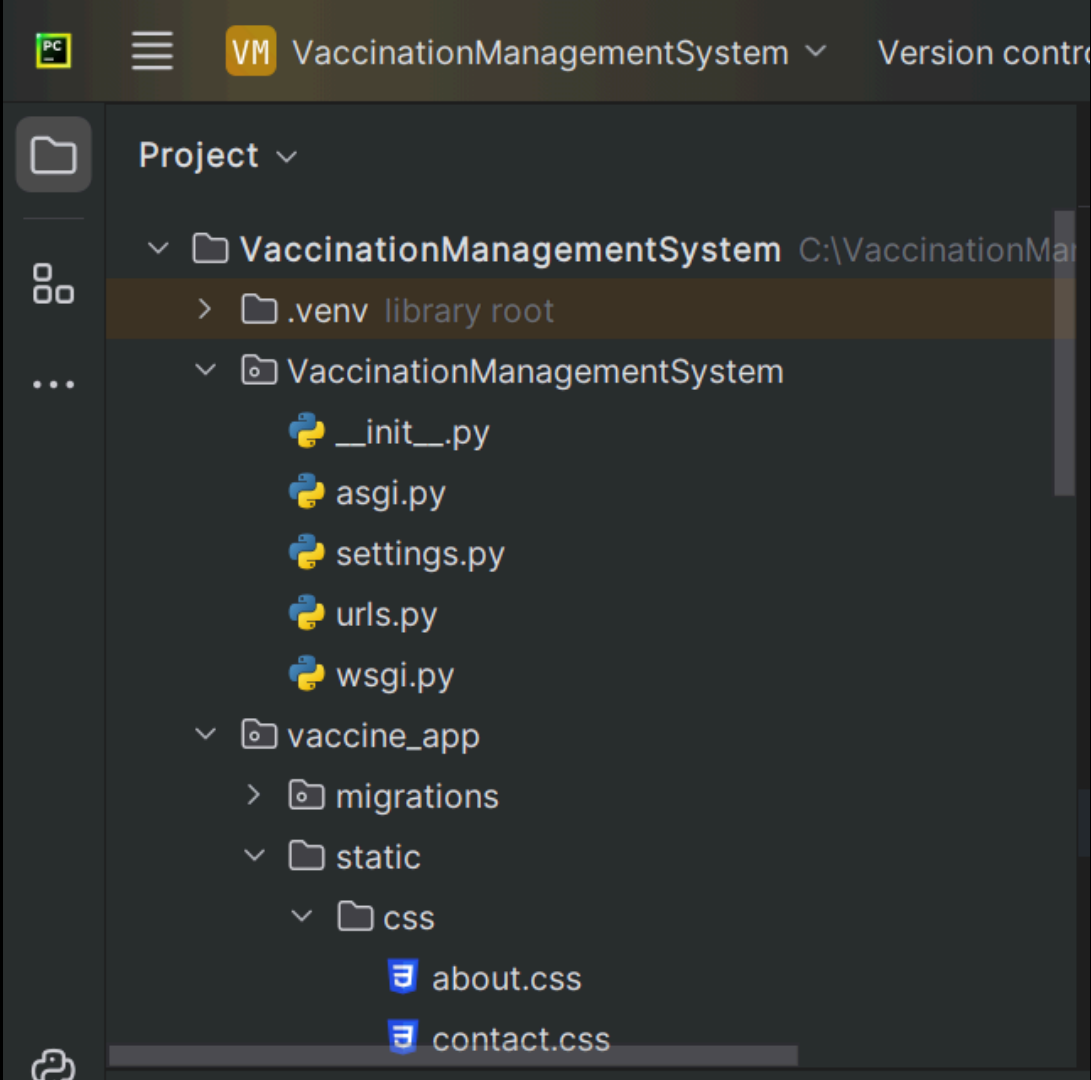
```
from django.shortcuts import render, redirect
from django.contrib.auth import authenticate, login as auth_login, logout as auth_logout
from vaccine_app.models import Vaccination, Child, Appointment

2 usages
def about(request):
    return render(request, template_name: 'about.html')

1 usage
def contact(request):
    return render(request, template_name: 'contact.html')

2 usages
def index(request):
    # If the user is not logged in, redirect to login
    if not request.user.is_authenticated:
        return redirect('login') # Redirect to the login page if the user is not aut

    # Ensure the user is an admin (staff member)
    if not request.user.is_staff:
```



# urls.py

- Maps URLs to views.
- Defines the routes that users can access in the browser and tells Django which function or class should handle each request.

```
ews.py  index.css  urls.py  x  <> index.html  models.py  <> add_child.html

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

import vaccine_app
from vaccine_app import views
from vaccine_app.views import about, index, admin_login, logout_view

urlpatterns = [
    path('admin/', admin.site.urls),
    path('about/', about, name='about'),
    path('', index, name='home'), # Home page (admin dashboard)
    path('login/', admin_login, name='login'),
    path('contact/', vaccine_app.views.contact, name='contact'),
    path('logout/', logout_view, name='logout'), # Updated the name to `logout_view`
    path('view_vaccination/', vaccine_app.views.vaccination, name='view_vaccination'),
    path('add_vaccination/', views.add_vaccination, name='add_vaccination'),
    path('delete_vaccination/<int:pid>/', views.delete_vaccination, name='delete_vaccination'),
    path('add_child/', views.add_child, name='add_child'),
    path('view_child/', views.view_child, name='view_child'),
    path('add_appointment/', views.add_appointment, name='add_appointment'),
    path('view_appointment/', views.view_appointment, name='view_appointment'),
```

# Creating Superuser

- `python manage.py createsuperuser --username satkarkhadka --email satkar@example.com`
- Asks for Password
- Can Login
- Manage the system

# Deleting Superuser

- `python manage.py shell`
- `from django.contrib.auth.models import User`
- `User.objects.filter(username='old_username').delete()`

# Working with Database Using Terminal

- `python manage.py shell`
- `from vaccine_app.models import Child, Vaccination, Appointment`
- `Child.objects.all()`, `Child.objects.all().delete()`
- `a = Child(full_name="Ashutosh")`
- `a.save()`
- `a.name`, `a.contact_number`

## Django administration

### Site administration

#### AUTHENTICATION AND AUTHORIZATION

Groups [+ Add](#) [Change](#)

Users [+ Add](#) [Change](#)

#### VACCINE\_APP

Appointments [+ Add](#) [Change](#)

Childs [+ Add](#) [Change](#)

Vaccinations [+ Add](#) [Change](#)

### Recent actions

#### My actions

+ xyz  
Vaccination



# Twilio Setup

Twilio Home

My first Twilio account

Trial: \$15.50 Upgrade

Jump to...

Admin

Account Dashboard

Develop

Monitor

# Phone Numbers

Manage

Active numbers

Released numbers

Buy a number

Verified Caller IDs

Twiml apps

Port & Host

Verified Caller IDs

Add a new Caller ID

Verify a number that you own to use it as a caller ID or as the 'To' number for outbound calls/messages from the Sandbox Number. The phone numbers you buy from Twilio, or port to Twilio, can always be used as caller IDs. [Learn more about Verified Caller IDs](#)

Number

Friendly Name

Filter

Clear filter

Number	Friendly Name	Actions
+977 984 0265528	+9779840265528	<a href="#">Remove</a>

Twilio Home

My first Twilio account

Trial: \$15.50 Upgrade

Account Dashboard

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# Phone Numbers

Manage

Active numbers

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Verified Caller IDs

Twiml apps

Port & Host


Regulatory Compliance

Short Codes

Beta

Alphanumeric Sender IDs

[Read 3rd-party integration FAQ](#)



Account Info

Account SID

ACecacfbef10f23537acd4001281aa39fd7

Auth Token

.....

Show

Always store your token securely to protect your account. [Learn more](#)

My Twilio phone number

+14054495877

You are in a trial account and can only send messages and make calls to [verified phone numbers](#). [Learn more about your trial account](#)

