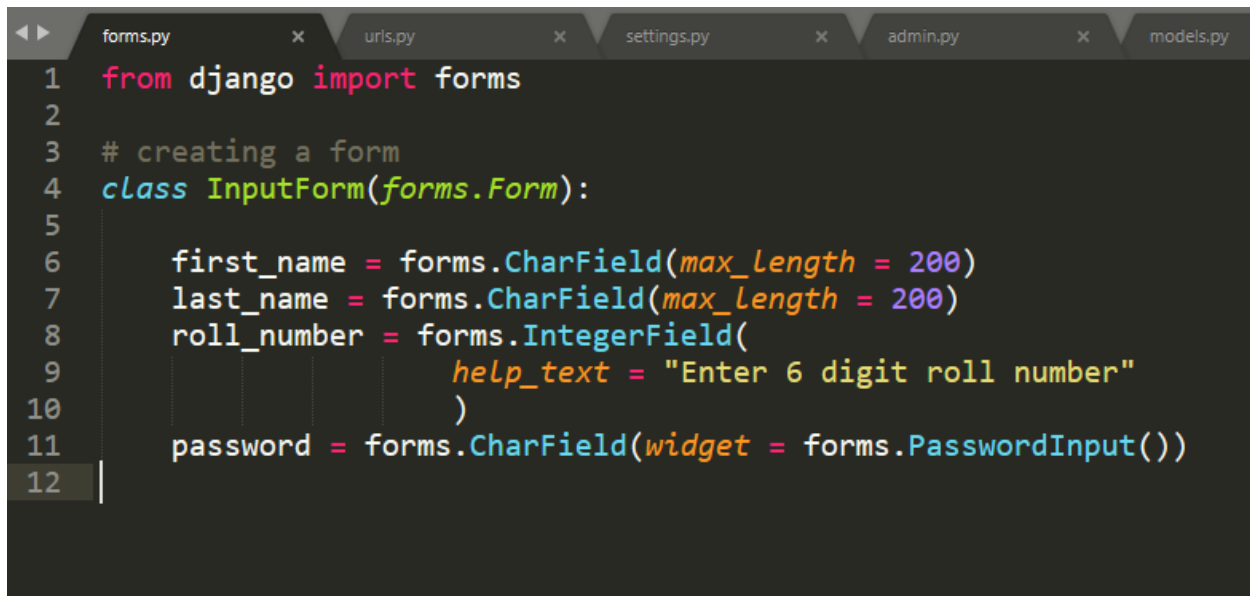


# CREATING A FORM USING DJANGO FORMS

## Step1: Writing code for the basic form

Inside your app (here demoApp) create a new file called forms.py. All the forms which are required in your project are to be created in this forms.py file under the app folder.

Type your code related to form creations in forms.py file



```
1 from django import forms
2
3 # creating a form
4 class InputForm(forms.Form):
5
6     first_name = forms.CharField(max_length = 200)
7     last_name = forms.CharField(max_length = 200)
8     roll_number = forms.IntegerField(
9         help_text = "Enter 6 digit roll number"
10    )
11     password = forms.CharField(widget = forms.PasswordInput())
12
```

## Step2: Rendering the form into a view

In order to render a form into a view we need to write the following code

```
views.py  forms.py  urls.py  settings.py
21 from django.shortcuts import render
22 from .forms import InputForm
23
24 # Create your views here.
25 def home_view(request):
26     context = {}
27     context['form'] = InputForm()
28     return render(request, "home.html", context)
29
```

This code takes the form as input and returns the rendered output which involves the html file (here home.html).

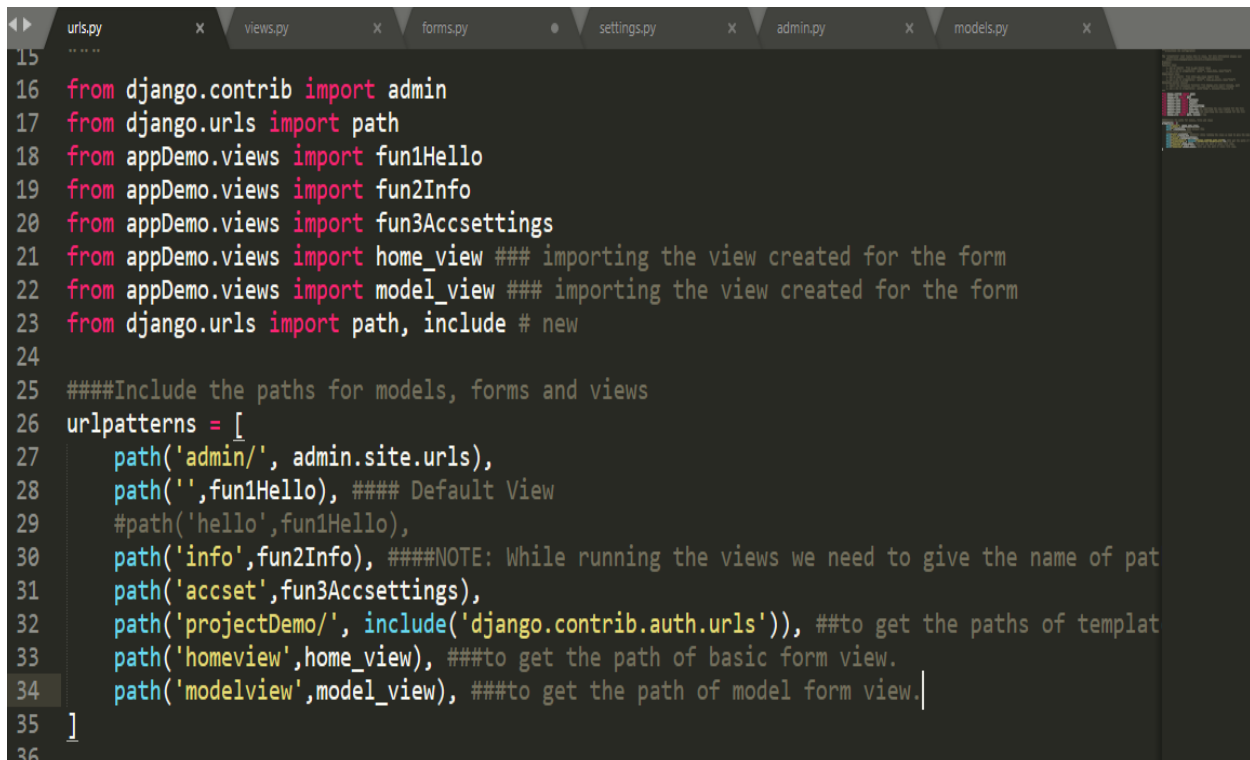
### Step 3: Creating the html file

Inside the template folder create a sample html file called home.html and type the following code inside it.

```
<form action = "" method = "post">
    {% csrf_token %}
    {{form }}
    <input type="submit" value=Submit">
</form>
```

**Step 4: Define the path to access the form**  
Go to urls.py present in your project folder (here

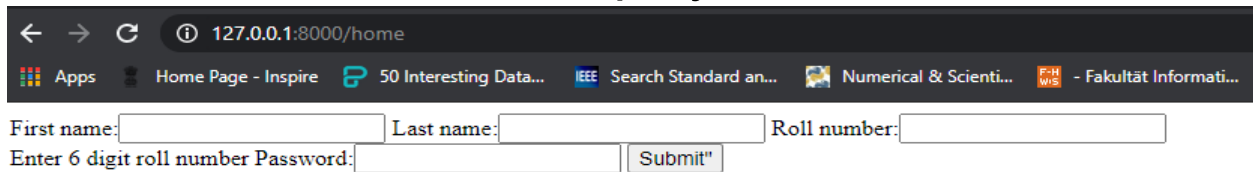
projectDemo) import the form view and specify the path to access it. Observe line n. 21 and line no.33.



```
15
16 from django.contrib import admin
17 from django.urls import path
18 from appDemo.views import fun1Hello
19 from appDemo.views import fun2Info
20 from appDemo.views import fun3Accsettings
21 from appDemo.views import home_view ### importing the view created for the form
22 from appDemo.views import model_view ### importing the view created for the form
23 from django.urls import path, include # new
24
25 #####Include the paths for models, forms and views
26 urlpatterns = [
27     path('admin/', admin.site.urls),
28     path('',fun1Hello), ##### Default View
29     #path('hello',fun1Hello),
30     path('info',fun2Info), #####NOTE: While running the views we need to give the name of pat
31     path('accset',fun3Accsettings),
32     path('projectDemo/', include('django.contrib.auth.urls')), ##to get the paths of templat
33     path('homeview',home_view), ###to get the path of basic form view.
34     path('modelview',model_view), ###to get the path of model form view.
35 ]
36
```

**Step 5: Accessing the form content through web browser** Specify the url Eg:  
<http://127.0.0.1:8000/home>

To see what the form displays.



The screenshot shows a web browser window with the address bar displaying '127.0.0.1:8000/home'. The browser's tab bar shows several tabs, including 'Apps', 'Home Page - Inspire', '50 Interesting Data...', 'Search Standard an...', 'Numerical & Scienti...', and '- Fakultät Informati...'. The main content area of the browser displays a form with the following fields and labels: 'First name:' followed by a text input field, 'Last name:' followed by a text input field, 'Roll number:' followed by a text input field, and 'Enter 6 digit roll number Password:' followed by a text input field. A 'Submit'" button is located to the right of the password field.

## CREATE DJANGO FORM FROM MODELS

### **Step0: Create a model**

Create a model in model.py file

Run the command from the command prompt

```
>>>python manage.py makemigrations
```

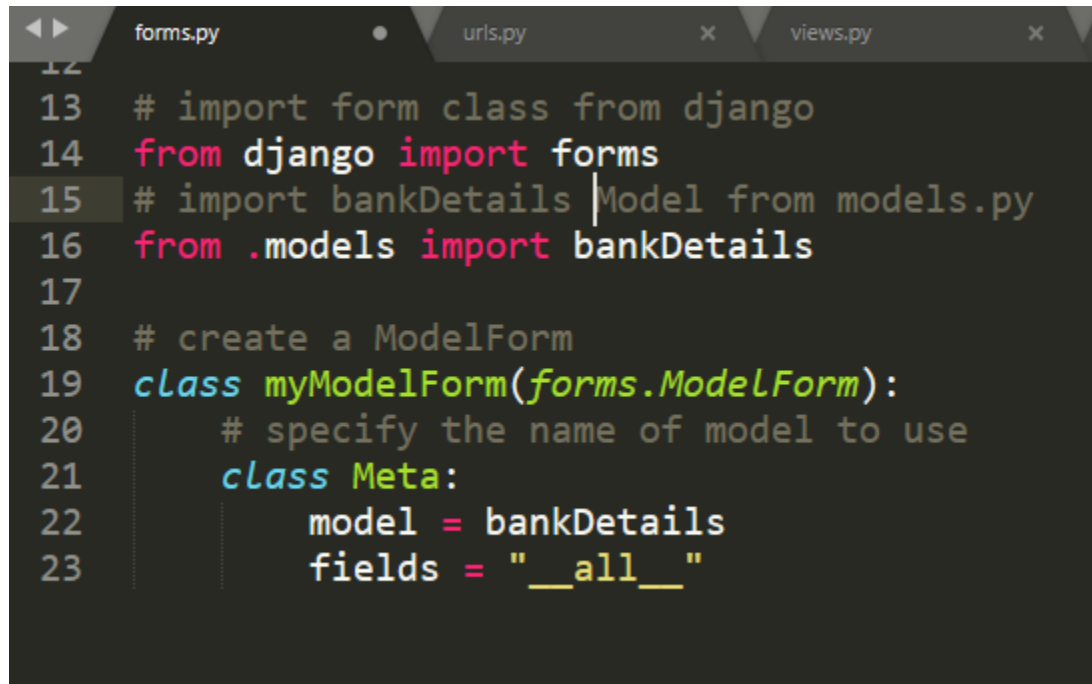
```
>>>python manage.py migrate
```

```
>>>python manage.py runserver
```

Once it is assured that the model is working fine go ahead for creating a form from the existing model.

### **Step1: Create a form from existing working model**

In order to create a form from existing working model go to forms.py file and type the following code.

A screenshot of a code editor with three tabs: forms.py, urls.py, and views.py. The forms.py tab is active, showing Python code for creating a Django ModelForm. The code includes imports for Django forms and the bankDetails model, and defines a class myModelForm that inherits from forms.ModelForm, with a Meta class specifying the model and fields.

```
12
13 # import form class from django
14 from django import forms
15 # import bankDetails Model from models.py
16 from .models import bankDetails
17
18 # create a ModelForm
19 class myModelForm(forms.ModelForm):
20     # specify the name of model to use
21     class Meta:
22         model = bankDetails
23         fields = "__all__"
```

## Step2: Create a view to render the model form

In order to render the form it is important to create a view. The following code is used to create a view for model form.

```

30
31 from django.shortcuts import render
32 from .forms import myModelForm
33
34 # Creating your view for a form using model bankDetails.
35 def model_view(request):
36     context = {}
37
38     # create object of form
39     form = myModelForm(request.POST or None, request.FILES or None)
40
41     # check if form data is valid
42     if form.is_valid():
43         # save the form data to model
44         form.save()
45
46     context['form'] = form
47     return render(request, "home.html", context)
48

```

Once the view is created it completes the MVT structure, which helps in rendering the form and directly saving the content in to the database.

### Step 3: Creating the html file

Inside the template folder create a sample html file called home.html and type the following code inside it.

```

<form action = "" method = "post">
    {% csrf_token %}
    {{form }}
    <input type="submit" value=Submit">
</form>

```

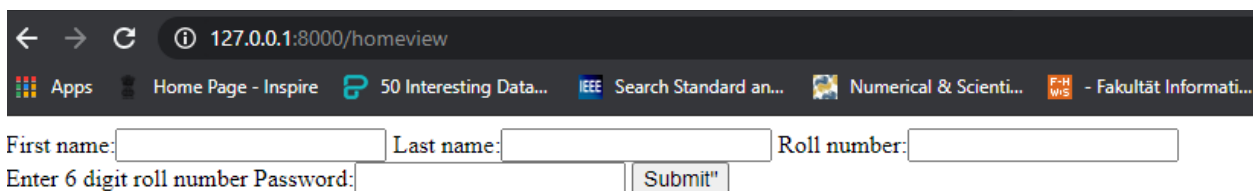
### Step 4: Define the path to access the form

Go to urls.py present in your project folder (here

projectDemo) and import the model form view (here model\_view) and specify the path to access it (observe line no.22 and line no. 34).

```
15
16 from django.contrib import admin
17 from django.urls import path
18 from appDemo.views import fun1Hello
19 from appDemo.views import fun2Info
20 from appDemo.views import fun3Accsettings
21 from appDemo.views import home_view ### importing the view created for the form
22 from appDemo.views import model_view ### importing the view created for the form
23 from django.urls import path, include # new
24
25 #####Include the paths for models, forms and views
26 urlpatterns = [
27     path('admin/', admin.site.urls),
28     path('',fun1Hello), ##### Default View
29     #path('hello',fun1Hello),
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31     path('accset',fun3Accsettings),
32     path('projectDemo/', include('django.contrib.auth.urls')), ##to get the paths of templat
33     path('homeview',home_view), ###to get the path of basic form view.
34     path('modelview',model_view), ###to get the path of model form view.
35 ]
36
```

**Step 5: Accessing the form content through web browser** Specify the url Eg:  
<http://127.0.0.1:8000/modelview>



127.0.0.1:8000/homeview

Apps Home Page - Inspire 50 Interesting Data... IEEE Search Standard an... Numerical & Scienti... F&H WIS - Fakultät Informati...

First name:  Last name:  Roll number:

Enter 6 digit roll number Password: