Form validation using Django

Models.py

```
from django.db import models
# model named Post

class Post(models.Model):

        Male = 'M'

        FeMale = 'F'

        GENDER_CHOICES = (

        (Male, 'Male'),

        (FeMale, 'Female'),

        )


        # define a username field with bound max length it can have

        username = models.CharField( max_length = 20, blank = False,

                                                            null = False)


        # This is used to write a post

        text = models.TextField(blank = False, null = False)


        # Values for gender are restricted by giving choices

        gender = models.CharField(max_length = 6, choices = GENDER_CHOICES,

                                                    default = Male)


        time = models.DateTimeField(auto_now_add = True)
```

Forms.py

```
from django.forms import ModelForm

from django import forms

from formValidationApp.models import *


# define the class of a form

class PostForm(ModelForm):
    class Meta:
        # write the name of models for which the form is made
        model = Post

        # Custom fields
        fields =["username", "gender", "text"]

    # this function will be used for the validation
    def clean(self):

        # data from the form is fetched using super function
        super(PostForm, self).clean()

        # extract the username and text field from the data
        username = self.cleaned_data.get('username')
        text = self.cleaned_data.get('text')

        # conditions to be met for the username length
        if len(username) < 5:
            self._errors['username'] = self.error_class([
                'Minimum 5 characters required'])
        if len(text) <10:
            self._errors['text'] = self.error_class([
                'Post Should Contain a minimum of 10 characters'])

        # return any errors if found
        return self.cleaned_data
```

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Urls.py

```
from django.contrib import admin
from django.urls import path, include
from django.conf.urls import url
from django.shortcuts import HttpResponse
from . import views


urlpatterns = [
    path('', views.home, name ='index'),
]
```

Views.py

```
from .models import Post
from .forms import PostForm
from .import views
from django.shortcuts import HttpResponse, render, redirect


def home(request):

    # check if the request is post
    if request.method =='POST':

        # Pass the form data to the form class
        details = PostForm(request.POST)

        # In the 'form' class the clean function
        # is defined, if all the data is correct
        # as per the clean function, it returns true
        if details.is_valid():

            # Temporarily make an object to be add some
            # logic into the data if there is such a need
            # before writing to the database
            post = details.save(commit = False)

            # Finally write the changes into database
            post.save()

            # redirect it to some another page indicating data
            # was inserted successfully
            return HttpResponse("data submitted successfully")

        else:

            # Redirect back to the same page if the data
            # was invalid
            return render(request, "home.html", {'form':details})
    else:

        # If the request is a GET request then,
        # create an empty form object and
        # render it into the page
        form = PostForm(None)
        return render(request, 'home.html', {'form':form})
```

Form validation using Django

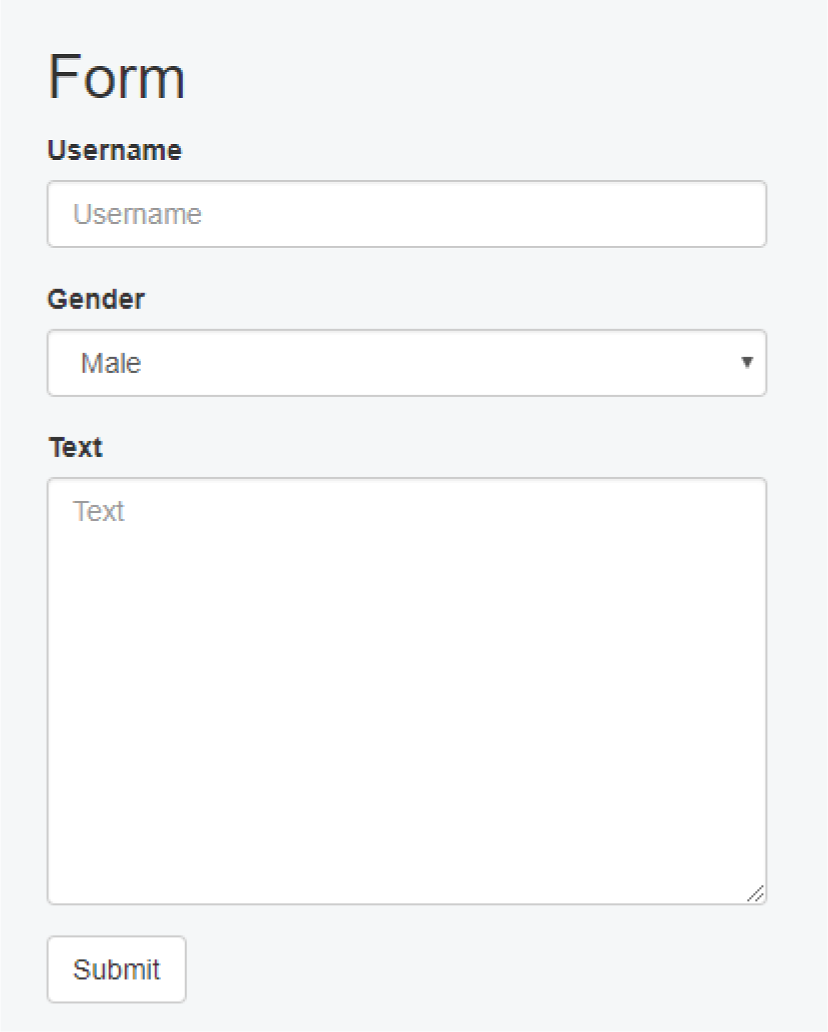
Home.html

```
{% load bootstrap3 %}

{% bootstrap_messages %}

<!DOCTYPE html>

<html lang="en">
<head >
        <title>Basic Form</title>
        <meta charset="utf-8" />
        <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">



<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js">

</script>

<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js">

</script>

</head>
<body style="padding-top: 60px;background-color: #f5f7f8 !important;">

        <div class="container">

        <div class="row">

                <div class="col-md-4 col-md-offset-4">

                <h2>Form</h2>

                        <form action="" method="post"><input type='hidden'/>

                        {%csrf_token %}
                                {% bootstrap_form form %}

<!-This is the form variable which we are passing from the function
```

```
of home in views.py file. That's the beauty of Django we

don't need to write much codes in this it'll automatically pass

all the form details in here

->

                        <div class="form-group">

                                <button type="submit" class="btn btn-default ">

                                Submit

                                </button>
                                </div>
                                </form>

                </div>

        </div>

</div>
</body>
</html>
```

Form validation using Django

Output



Form

Username

Username

Gender

Male

Text

Text