Last Updated : 21 Sep, 2021

This article revolves around how to add custom validation to a particular field. For example to add validation of an email to a CharField by specifying a particular format. There can be multiple ways on how to achieve custom validation. In this article, we are going to show it from the model itself so that you need not manipulate it elsewhere.
These Validation are run when you are trying to create an instance of a model. Technically, this validation is implemented after you run ModelName.objects.create(data = data).

Syntax –

```
field_name = models.Field(validators = [function 1, function 2])
```

Django Custom Field Validation Explanation

Illustration of **validators** using an Example. Consider a project named geeksforgeeks having an app named geeks.

> *Refer to the following articles to check how to create a project and an app in Django.*
>
> - *How to Create a Basic Project using MVT in Django?*
> - *How to Create an App in Django ?*

Enter the following code into models.py file of **geeks** app. We will be using CharField for experimenting for all field options.

Python3

```
from django.db import models
from django.db.models import Model
# Create your models here.

class GeeksModel(Model):
    geeks_mail = models.CharField(
                    max_length = 200,
                    )
```

Now we will apply a custom validation so that the above field is validated for google mail IDs only. Create a function that accepts an argument called **value**. One can apply any type of operation on value now. so let us check if our function value contains **@gmail.com** to be validated for google mail IDs only.

Python3

```
from django.db import models
# importing validationerror
from django.core.exceptions import ValidationError

# creating a validator function
def validate_geeks_mail(value):
    if "@gmail.com" in value:
        return value
    else:
        raise ValidationError("This field accepts mail id of google only")


# Create your models here.
class GeeksModel(models.Model):
    geeks_mail = models.CharField(max_length = 200)
```

Now let us add this function as a validator in our field. Note that one validator function can be used for multiple fields simultaneously.

Python3

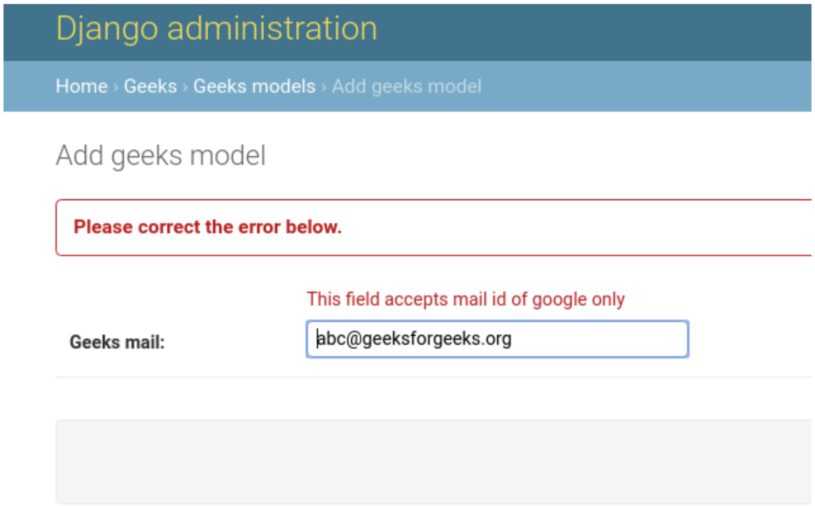
```
from django.db import models
# importing validationerror
from django.core.exceptions import ValidationError
```

```
# creating a validator function
def validate_geeks_mail(value):
    if "@gmail.com" in value:
        return value
    else:
        raise ValidationError("This field accepts mail id of google only")


# Create your models here.
class GeeksModel(models.Model):
    geeks_mail = models.CharField(
                     max_length = 200,
                     validators =[validate_geeks_mail]
                     )
```

Let us try to create an instance without gmail.com and check if our validation worked or not. Note that after every change in models.py one needs to run makemigrations and migrate commands.
In your browser go to http://localhost:8000/admin/geeks/geeksmodel/add/ and enter “abc@geeksforgeeks.org”.

Let us check if it gets saved in database.



Add geeks model

Please correct the error below.

This field accepts mail id of google only

Geeks mail: abc@geeksforgeeks.org

So the validation worked and this field can only accept email ids ending with @gmail.com. This way one can apply any kind of custom validation on value.

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