

By defaultly all fields are not null.

AutoField() :-

An IntegerField that automatically increments according to available ids. It starts from 1 to n.

default_parameters:- ()

BigAutoField() :-

it is same as AutoField(). It start from. From 1 to 9223372036854775807

default_parameters:- ()

BinaryField():- it store the data in binary formate.

default_parameters:- ()

BigIntegerField():- it also an integer field its range from (-9223372036854775807 , 9223372036854775807). it accepts numbers only

default_parameters:- ()

BooleanField():- it ia boolian field .it stores True/False or 0/1. it is check box in django admin dashboard.

default_parameters:- ()

CharField():- it is a varachr field .it can store numbers,charcters,letters. But we must pass the length .

default_parameters:- (max_length=int)

DateField():- it store the date.

default_parameters:- (auto_now=False,auto_now_add=False ...etc)

here auto_now =True :- it stores the correct date when ever the recordes change.

auto_now_add=True :- Whenever the record stored it adds correct date defaultly.

DateTimeField():- it is similar to dateField.it store date along with the time

default_parameters:-(*auto_now=False,auto_now_add=False ...etc*)

here `auto_now =True` :- it stores the correct datetime when ever the recordes change.

`auto_now_add=True` :- Whenever the record stored it adds correct datetime defaultly.

DecimalField():- it store the decimal values.we must pass the two parameters

default_parameters:-(`max_digits=int,decimal_places=int`)

`max_digits` :- The maximun number of digits allowed in the number.

`decimal_places` :-The number of decimal places to store with the number.

DurationField():-

default_parameters:-()

EmailField():-it is also a charField.but its `max_length` is high.

default_parameters:-(`max_length=245`)

FileField() :-

default_parameters:-()

FilePathField():-

default_parameters:-()

FloatField():- it stores the floating point numbers eventhough we store the integers.

default_parameters:-()

ImageField():- it store the address of the image.it is a chafield.

But we must pass the some parameters.

default_parameters:-(`upload_to=directory_name`)

`upload_to` :- it save the image in the given directory and it holds

the file name.

IntegerField():- it stores a number in the range of
(-2147483648,2147483648)

default_parameters:-()

GenericIPAddressField():-

default_parameters:-()

NullBooleanField():- it is same as boolField.but it have default
parameter in-builtly **null=True**

default_parameters:-()

PositiveIntegerField():- it stores +ve numbers from 0 to
2147483647

default_parameters:-()

PositiveSmallIntegerField():- it stores +ve numbers from 0 to
32767

default_parameters:-()

SlugField() :- it is a chafield.but it have default parameter
in-builtly max_length=50. Generally it is used to
store urls.

default_parameters:-()

TextField() :- it is a chafield.but it have default parameter
in-builtly max_length=2000.

default_parameters:-()

TimeField() :- it stores the time.

default_parameters:-(**auto_now =True,auto_now_add=True**)

auto_now =True :- it stores the correct time when ever
the records change.

auto_now_add=True :- Whenever the record stored it adds
correct time defaultly.

URLField() :- it is a chafield.but it have default parameter
in-builtly max_length=200.

default_parameters:-()

UUIDField() :-it is a chafield.but it have default parameter
in-builtly max_length=32.

default_parameters:-()

ForeignKey() :-

default_parameters:-()

ManyToManyField() :-

OneToOneField() :-

Field Options

1.null=True/False.

If True, Django will store empty values as NULL in the database. Default is False.

Note:- Avoid using **null** on string-based fields such CharField and TextField

2.blank=True/False.

If True, the field is allowed to be blank. Default is False.

Note:- if it is True this field is optional.

3.choices

it gives options to select. we must use these options only

syntax:-

```
options_name = [  
    ('FR', 'Freshman'),  
    ('SO', 'Sophomore'),  
    ('JR', 'Junior'),  
    ('SR', 'Senior'),  
    ('GR', 'Graduate'),  
]
```

we must place the options in tuple. in the tuple the first one shows when we insert the data but in the database it stores the second one.

```
cl_name = models.CharField(choice=options_name)
```

similarly

```
MEDIA_CHOICES = [  
    ('Audio', (  
        ('vinyl', 'Vinyl'),  
        ('cd', 'CD'),  
    )  
),  
    ('Video', (  
        ('vhs', 'VHS Tape'),  
        ('dvd', 'DVD'),  
    )  
),  
    ('unknown', 'Unknown'),  
]
```

4.db_column

The name of the database column to use for this field. If this isn't given, Django will use the field's name.

```
cl_name=models.__field(db_column='mahi')  
now c_name is replaced with mahi
```

5.db_index=True/False

If True, a database index will be created for this field. By default it is False.

6.default

The default value for the field. This can be a value or a callable object. If callable it will be called every time a new object is created.

```
Models.__Field(default=value/int/fun())
```

7.editable

If False, the field will not be displayed in the admin or any other **ModelForm**. They are also skipped during **model validation**. Default is True

eg:- id

8.error_messages

9.help_text

10.primary_key=True/False

it is combination of not null and unique.

11.unique=True/False

it allows unique values only.

12.auto_now_add :- it stores the correct datetime

/date /timewhenever the recordes changes /updated.

13.auto_now_add=True :- Whenever the record stored it adds correct datetime/time/date defaultly.