

Relationship Models

Q → What is CASCADE ?

Create Relation

Inside App (models.py)

```
from django.db import models
from django.utils import timezone
from django.contrib.auth.models import User
```

```
class Lesson6(models.Model):
```

```
    LESSON_CHOICE = [
```

```
        ('lesson1', '1'),
```

```
        ('lesson2', '2'),
```

```
        ('lesson3', '3'),
```

```
        ('lesson4', '4'),
```

```
    ]
```

```
    name = models.CharField(max_length=100)
```

```
    image = models.ImageField(upload_to='lessons/')
```

```
    date_added = models.DateTimeField(default=timezone.now)
```

```
    type = models.CharField(max_length=50, choices=LESSON_CHOICE)
```

```
    discription = models.TextField(max_length=200)
```

```
    def __str__(self):
```

```
        return self.name
```


One to Many

class LessonReview(models.Model):

lesson = models.ForeignKey(Lesson6, on_delete=models.CASCADE, related_name='reviews')

user = models.ForeignKey(User, on_delete=models.CASCADE)

rating = models.IntegerField()

date_added = models.DateTimeField(default=timezone.now)

def __str__(self):

return f'{self.user.username} review for {self.lesson.name}'

Many to Many

class Stone(models.Model):

name = models.CharField(max_length=100)

location = models.CharField(max_length=100)

lesson_list = models.ManyToManyField(Lesson6, related_name='lessons')

def __str__(self):

return self.name

One to one

class LessonCertificate(models.Model):

lesson = models.OneToOneField(Lesson6, on_delete=models.CASCADE, related_name='certificate')

certificate_number = models.CharField(max_length=100)

issued_date = models.DateTimeField(default=timezone.now)

valid_untill = models.DateTimeField()

def __str__(self):

return f'Certificate for {self.name.lesson}'

Teacher's Signature _____

App

(in admin.py)

Add models

```
from django.contrib import admin
from .models import Lesson6, LessonReview, Stone, LessonCertificate
```

```
class LessonReviewInlineAdmin(admin.TabularInline):
    model = LessonReview
    extra = 2
```

```
class LessonVarietyAdmin(admin.ModelAdmin):
    list_display = ('name', 'type', 'date-added')
    inlines = [LessonReviewInlineAdmin]
```

```
class StoneAdmin(admin.ModelAdmin):
    list_display = ('name', 'location')
    filter_horizontal = ('session-list',)
```

```
class LessonCertificateAdmin(admin.ModelAdmin):
    list_display = ('session', 'certificate-number')
```

must be same
on models
variables name

```
admin.site.register(Lesson6, LessonVarietyAdmin)
```

```
admin.site.register(Stone, StoneAdmin)
```

```
admin.site.register(LessonCertificate, LessonCertificateAdmin)
```

Note

Don't forget to migrate