Part3

編寫Views

在polls/views.py增加以下
```
def detail(request, question_id):
    return HttpResponse("You're looking at question %s." % question_id)

def results(request, question_id):
    response = "You're looking at the results of question %s."
    return HttpResponse(response % question_id)

def vote(request, question_id):
    return HttpResponse("You're voting on question %s." % question_id)
```

polls.urls更改為

```python
from django.urls import path

from . import views

urlpatterns = [

    # ex: /polls/

    path('', views.index, name='index'),

    # ex: /polls/5/

    path('<int:question_id>/', views.detail, name='detail'),

    # ex: /polls/5/results/

    path('<int:question_id>/results/', views.results, name='results'),

    # ex: /polls/5/vote/

    path('<int:question_id>/vote/', views.vote, name='vote'),

]
```

接下來執行runserver可以開啟http://localhost:8000/polls/
出現以上新增的、detail、result、votes的介面

接下來要使剛剛新增的介面可以真實的呈現出來
在polls/views.py輸入
```python
from django.http import HttpResponse

from .models import Question

def index(request):
    latest_question_list = Question.objects.order_by('-pub_date')[:5]
```

```
        template = loader.get_template('polls/index.html')
        context = {
            'latest_question_list': latest_question_list,
        }
        return HttpResponse(template.render(context, request))
```
記得*detail, results, vote*不要去動到

再創一個資料夾polls/templates/polls/

裡創建一個空白檔案index.html

貼上
```
{% if latest_question_list %}
    <ul>
    {% for question in latest_question_list %}
        <li><a href="/polls/{{ question.id }}/">{{ question.question_text }}</a></li>
    {% endfor %}
    </ul>
{% else %}
    <p>No polls are available.</p>
{% endif %}
```
回到http://127.0.0.1:8000/polls/

可以看到以上用html編寫的網頁內容

而還有更簡單的方式可以編寫index，最後view.py修改成以下，也可以有以上的功能
```
from django.http import HttpResponse
from django.template import loader
from django.shortcuts import render

from .models import Question

def index(request):
    latest_question_list = Question.objects.order_by('-pub_date')[:5]
    context = {'latest_question_list': latest_question_list}
    return render(request, 'polls/index.html', context)
def detail(request, question_id):
    return HttpResponse("You're looking at question %s." % question_id)

def results(request, question_id):
    response = "You're looking at the results of question %s."
    return HttpResponse(response % question_id)

def vote(request, question_id):
    return HttpResponse("You're voting on question %s." % question_id)
```

發生錯誤404

如果question的ID不存在的話，會跳出404的畫面，比如說

http://127.0.0.1:8000/polls/2/

在polls/views.py的detail下新增
```
from django.http import Http404

from django.shortcuts import render
```

```python
from .models import Question

# ...

def detail(request, question_id):

    try:

        question = Question.objects.get(pk=question_id)

    except Question.DoesNotExist:

        raise Http404("Question does not exist")

    return render(request, 'polls/detail.html', {'question': question})
```

並在polls/templates/polls/創立新的檔案detail.html輸入
{{ question }}
而已上也可以用更簡短的方式呈現

```python
from django.shortcuts import get_object_or_404, render


from .models import Question

# ...

def detail(request, question_id):

    question = get_object_or_404(Question, pk=question_id)

    return render(request, 'polls/detail.html', {'question': question})
```

使用模板

在polls/templates/polls/detail.html裡改成

```html
<h1>{{ question.question_text }}</h1>

<ul>

{% for choice in question.choice_set.all %}

    <li>{{ choice.choice_text }}</li>

{% endfor %}

</ul>
```

用HTML變更網頁版面

移除hardcoded URLs

原先在polls/index.html裡出現
{{ question.question_text }}
如果在內容很龐大的時候會變成十分複雜，然而，我們之前在polls.urls都有為每個
function設定一個urls的名字，所以可以改寫成以下
{{ question.question_text }}
如果想把detail在url裡的名子改成specifics，可以把同一條改成

```
path('specifics/<int:question_id>/', views.detail, name='detail'),
```

命名URL

在這個練習裡因為app只有一個，不會亂掉，但是以後可能會出現多個app，為了區分他們必須各自為他命名，並用{% url %}去尋找。

polls/urls.py
```python
from django.urls import path

from . import views

app_name = 'polls'
urlpatterns = [
    path('', views.index, name='index'),
    path('<int:question_id>/', views.detail, name='detail'),
    path('<int:question_id>/results/', views.results, name='results'),
    path('<int:question_id>/vote/', views.vote, name='vote'),
]
```

polls/templates/polls/index.html
```html
<li><a href="{% url 'detail' question.id %}">{{ question.question_text }}</a></li>
```
改成
```html
<li><a href="{% url 'polls:detail' question.id %}">{{ question.question_text }}</a></li>
```