

## 2. django template

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### 2.1 template

context variable: create a variable called 'headline'.

url: s2/variable output: This is a headline.

```
<div class="container">
    <h1>{{ headline }}</h1>
</div>
```

```
def variable(request: HttpRequest):
    context = {
        'headline': 'This is a headline'
    }
    return render(request, 's2/variable.html', context=context)
```

condition: write a page called isitchristmas

url: s2/isitchristmas output: Yes or No

```
<div class="container">
    {% if ischristmas %}
        <h1>Happy Christmas !!!</h1>
    {% else %}
        <h1>NO</h1>
    {% endif %}
</div>
```

```
def isitchristmas(request):
    today = datetime.today()
    today = datetime(2018, 12, 25)
    context = {
        'ischristmas': (today.month == 12 and today.day == 25)
    }
    return render(request, 's2/isitchristmas.html', context=context)
```

loop: write a page to display three friends

url: s2/friends output: a table that contains first and last name of three friends

```
{% for friend in friends %}
    <tr>
        <td> {{ friend.first }} </td>
        <td> {{ friend.last }} </td>
    </tr>
{% endfor %}
```

```
def friends(request):
    friends = [{ 'first': "Paul", 'last': "Kim"},
                { 'first': "Richard", 'last': "Park" },
                { 'first': "Lucas", 'last': "Jung" }]

    context = {
        "friends": friends
    }

    return render(request, 's2/friends.html', context=context)
```

link: write two pages that link each other.

url: s2/page1 s2/page2

```
<h1>Page 1</h1>
<p>
    <a class="btn btn-primary btn-lg" href="{% url 'page2' %}"
    role="button">Go to page2</a>
</p>
```

```
<h1>Page 2</h1>
<p>
    <a class="btn btn-primary btn-lg" href="{% url 'page1' %}"
    role="button">Go to page1</a>
</p>
```

```
def page1(request):
    print("page1")
    return render(request, 's2/page1.html')
```

```
def page2(request):
    return render(request, 's2/page2.html')
```

## 2.2 layout

layout.html:

```
<!doctype html>
<html lang="en">
  <head>
    <title>Session 2</title>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1,
shrink-to-fit=no">

    <!-- Bootstrap CSS -->
    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.2/css/bootstrap.min.cs
s" integrity="sha384-
Smlep5jCw/wG7hdkwQ/Z5nLiefveQRIY9nfy6xoR1uRYBtpZgI6339F5dgvm/e9B"
crossorigin="anonymous">
  </head>
  <body>
    <nav class="navbar navbar-expand-lg navbar-light bg-light">
      <a class="navbar-brand" href="#">Session2</a>
      <button class="navbar-toggler hidden-lg-up" type="button" data-
toggle="collapse" data-target="#collapsibleNavId" aria-
controls="collapsibleNavId"
        aria-expanded="false" aria-label="Toggle navigation">
        <span class="navbar-toggler-icon"></span>
      </button>
      <div class="collapse navbar-collapse" id="collapsibleNavId">
        <ul class="navbar-nav mr-auto mt-2 mt-lg-0">
          <li class="nav-item active">
            <a class="nav-link" href="{% url 'home' %}">Home <span
class="sr-only">(current)</span></a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="{% url 'page1' %}">Page1</a>
          </li>
        </ul>
      </div>
    </nav>

    <div class="container">
      {% block content %}
      {% endblock content %}
```

```

    </div>

    <!-- Optional JavaScript -->
    <!-- jQuery first, then Popper.js, then Bootstrap JS -->
    <script src="https://code.jquery.com/jquery-3.3.1.slim.min.js"
    integrity="sha384-
    q8i/X+965Dz00rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo"
    crossorigin="anonymous"></script>
    <script
    src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.3/umd/popper.min.js"
    integrity="sha384-
    ZMP7rVo3mIykV+2+9J3UJ46jBk0WLaUAdn689aCwoqbBJiSnjAK/l8WvCWIPm49"
    crossorigin="anonymous"></script>
    <script
    src="https://stackpath.bootstrapcdn.com/bootstrap/4.1.2/js/bootstrap.min.js"
    integrity="sha384-
    o+RDsa0aLu++PJvFqy8fFScvbHFLtbvScb8AjopnFD+iEQ7wo/CG0xlczd+20/em"
    crossorigin="anonymous"></script>
  </body>
</html>

```

home.html

```

{% extends 's2/layout.html' %}

{% block content %}
  <h1>Home page</h1>
{% endblock content %}

```

page1.html

```

{% extends 's2/layout.html' %}

{% block content %}
  <h1>Page1</h1>
{% endblock content %}

```

s2.views: write view functions for home and page1

```

def home(request: HttpRequest):
    return render(request, 's2/home.html')

```

```
def page1(request: HttpRequest):  
    return render(request, 's2/page1.html')
```

s2.urls: write a url mapping

```
urlpatterns = [  
    ...  
    path('', views.home, name="home"),  
    path('page1', views.page1, name="page1")  
]
```

## 2.3 post

note: write a page that display a list of notes and a form for a new note.

url: s2/notes

```
<ul>  
    {% for note in notes %}  
        <li>{{ note }}</li>  
    {% endfor %}  
</ul>  
  
<form action="{% url 'note' %}" method="post">  
    {% csrf_token %}  
    <input type="text" name="note" id="note" placeholder="Please enter a  
note">  
    <button type="submit">Add Note</button>  
</form>
```

```
notes = []  
def note(request: HttpRequest):  
  
    if request.method == "POST":  
        note = request.POST.get('note')  
        notes.append(note)  
  
    context = { 'notes': notes }  
    return render(request, 's2/notes.html', context=context)
```

## 2.3 courses

```

<h1>Courses</h1>

<table class="table">
  <thead>
    <tr>
      <th>Subject</th>
      <th>State Date</th>
      <th>Instructor</th>
    </tr>
  </thead>
  <tbody>

    {% for course in courses %}
      <tr>
        <td scope="row">{{ course.subject }} </td>
        <td> {{ course.startDate }} </td>
        <td> {{ course.instructor }} </td>
      </tr>
    {% endfor %}
  </tbody>
</table>

<hr>

<h1>Add new course</h1>
<form action="{% url 'course' %}" method="post">
  <div class="container">
    <form>
      {% csrf_token %}
      <div class="form-group row">
        <label for="inputName" class="col-sm-3 col-form-
label">Subject</label>
        <div class="col-sm-9">
          <input type="text" class="form-control"
name="subject" id="txtSubject" placeholder="Subject" required>
        </div>
      </div>
      <div class="form-group row">
        <label for="inputName" class="col-sm-3 col-form-
label">Start Date</label>
        <div class="col-sm-9">
          <input type="text" class="form-control"
name="startDate" id="txtStartDate" placeholder="Start Date">
        </div>
      </div>
      <div class="form-group row">
        <label for="inputName" class="col-sm-3 col-form-
label">Instructor</label>
        <div class="col-sm-9">

```

```

        <input type="text" class="form-control"
name="instructor" id="txtInstructor" placeholder="Instructor">
    </div>
</div>

    <div class="form-group row">
        <div class="offset-sm-2 col-sm-10">
            <button type="submit" class="btn btn-primary">Add a
course</button>
        </div>
    </div>
</form>
</div>
</form>

```

```

courses = []
def course(request: HttpRequest):

    if request.method == 'POST':
        subject = request.POST.get('subject')
        startDate = request.POST.get('startDate')
        instructor = request.POST.get('instructor')

        course = {
            'subject': subject,
            'startDate': startDate,
            'instructor': instructor
        }
        courses.append(course)

    context={ 'courses': courses}
    return render(request, 's1/course.html', context=context)

```