

Code Screenshots

hello/forms.py

```
hello_django > hello > forms.py > ...
1  from django import forms
2  from hello.models import LogMessage
3
4  class LogMessageForm(forms.ModelForm):
5      class Meta:
6          model = LogMessage
7          fields = ("message",) # NOTE: the trailing comma is required
```

hello/models.py

```
hello_django > hello > urls.py > ...
1  from hello import views
2  from django.urls import path
3  from hello.models import LogMessage
4
5
6  home_list_view = views.HomeListView.as_view(
7      queryset = LogMessage.objects.order_by("-log_date")[:5], # :5 limits the results to the five most recent
8      context_object_name="message_list",
9      template_name="hello/home.html",
10 )
11
12
13 urlpatterns = [
14     path("", home_list_view, name="home"),
15     path("hello/<str:name>/", views.hello_there, name="hello"),
16     path("about/", views.about, name="about"),
17     path("contact/", views.contact, name="contact"),
18     path("log/", views.log_message, name="log"),
19 ]
```

hello/urls.py

```
hello_django > hello > models.py > LogMessage > __str__
1  from django.db import models
2  from django.utils import timezone
3
4
5  class LogMessage(models.Model):
6      message = models.CharField(max_length=300)
7      log_date = models.DateTimeField("date logged")
8      def __str__(self):
9          """Returns a string representation of a message."""
10         date = timezone.localtime(self.log_date)
11         return f'{self.message}' logged on {date.strftime('%A, %d %B, %Y at %X')}"
```

hello/views.py

```
1 from datetime import datetime
2 from hello.models import LogMessage
3 from django.shortcuts import render
4 from django.http import HttpResponseRedirect
5 from django.shortcuts import redirect
6 from hello.forms import LogMessageForm
7 from django.views.generic import ListView
8
9
10 class HomeListView(ListView):
11     """Renders the home page, with a list of all messages."""
12     model = LogMessage
13
14     def get_context_data(self, **kwargs):
15         context = super(HomeListView, self).get_context_data(**kwargs)
16         return context
17
18
19 def hello_there(request, name):
20     print(request.build_absolute_uri())
21     return render(request, "hello/hello_there.html", {
22         'name': name,
23         'date': datetime.now()
24     })
25
26
27 def about(request):
28     return render(request, "hello/about.html")
29
30
31 def contact(request):
32     return render(request, "hello/contact.html")
33
34
35 def log_message(request):
36     form = LogMessageForm(request.POST or None)
37
38     if request.method == "POST":
39         if form.is_valid():
40             message = form.save(commit=False)
41             message.log_date = datetime.now()
42             message.save()
43             return redirect("home")
44     else:
45         return render(request, "hello/log_message.html", {"form": form})
46
```

web_project/setting.py —----- Including our app created using “python manage.py startapp hello” (app_name)

```
hello_django > web_project > settings.py > ...
11  """
12
13  from pathlib import Path
14
15  # Build paths inside the project like this: BASE_DIR / 'subdir'.
16  BASE_DIR = Path(__file__).resolve().parent.parent
17
18
19  # Quick-start development settings - unsuitable for production
20  # See https://docs.djangoproject.com/en/5.0/howto/deployment/checklist/
21
22  # SECURITY WARNING: keep the secret key used in production secret!
23  SECRET_KEY = 'django-insecure-gofx(li8=h&qogqmlzf&f@orbp@jaj6%-*vpc#5r+opn#r#w20'
24
25  # SECURITY WARNING: don't run with debug turned on in production!
26  DEBUG = True
27
28  ALLOWED_HOSTS = []
29
30
31  # Application definition
32
33  INSTALLED_APPS = [
34      'django.contrib.admin',
35      'django.contrib.auth',
36      'django.contrib.contenttypes',
37      'django.contrib.sessions',
38      'django.contrib.messages',
39      'django.contrib.staticfiles',
40      'hello',
41  ]
42
43  MIDDLEWARE = [
44      'django.middleware.security.SecurityMiddleware',
45      'django.contrib.sessions.middleware.SessionMiddleware',
46      'django.middleware.common.CommonMiddleware',
47      'django.middleware.csrf.CsrfViewMiddleware',
48      'django.contrib.auth.middleware.AuthenticationMiddleware',
49      'django.contrib.messages.middleware.MessageMiddleware',
50      'django.middleware.clickjacking.XFrameOptionsMiddleware',
51  ]
52
53  ROOT_URLCONF = 'web_project.urls'
```

HTML Code Snippets

hello/templates/hello/about.html

```
hello_django > hello > templates > hello > about.html > p
1  {% extends "hello/layout.html" %} {% block title %} About us {% endblock %} {% block content %}
2  <p>About page for the Visual Studio Code Django tutorial.</p>
3  {% endblock %}
4
```

hello/templates/hello/contact.html

```
hello_django > hello > templates > hello > contact.html > p
1  {% extends "hello/layout.html" %} {% block title %} Contact Us {% endblock %} {% block content %}
2  <p>Contact page for the Visual Studio Code Django tutorial.</p>
3  {% endblock %}
4
```

hello/templates/hello/home.html

```
hello_django > hello > templates > hello > home.html > table.message_list > tbody
1  {% extends "hello/layout.html" %} {% block title %} Home {% endblock %} {% block content %}
2  <h2>Logged messages</h2>
3
4  {% if message_list %}
5  <table class="message_list">
6      <thead>
7          <tr>
8              <th>Date</th>
9              <th>Time</th>
10             <th>Message</th>
11         </tr>
12     </thead>
13     <tbody>
14         {% for message in message_list %}
15         <tr>
16             <td>{{ message.log_date | date:'d M Y' }}</td>
17             <td>{{ message.log_date | time:'H:i:s' }}</td>
18             <td>{{ message.message }}</td>
19         </tr>
20         {% endfor %}
21     </tbody>
22 </table>
23 {% else %}
24 <p>No messages have been logged. Use the <a href="{% url 'log' %}">Log Message form.</a></p>
25 {% endif %} {% endblock %}
26
```

hello/templates/hello/hello_there.html

```
hello_django > hello > templates > hello > hello_there.html > ...
1  <!DOCTYPE html>
2  <html>
3      <head>
4          <meta charset="utf-8" />
5          <title>Hello, Django</title>
6          {% load static %}
7          <link rel="stylesheet" type="text/css" href="{% static 'hello/site.css' %}" />
8      </head>
9      <body>
10         <span class="message">Hello, there {{ name }}!</span> It's {{ date | date:'l, d F, Y' }} at {{ date
11         time:'H:i:s' }}</span>
12     </body>
13 </html>
14
```

hello/templates/hello/layout.html

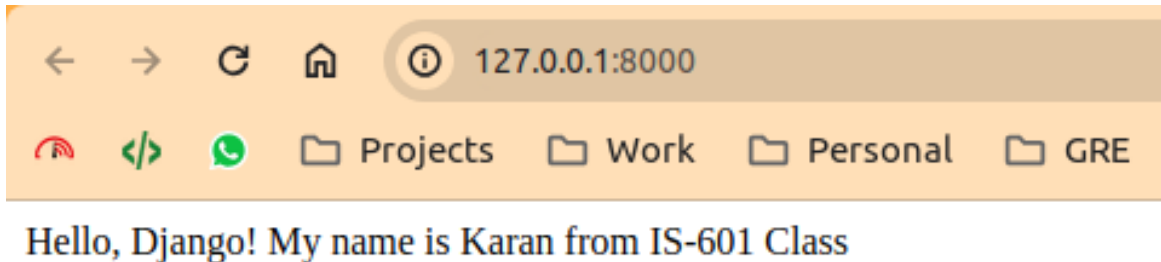
```
hello_django > hello > templates > hello > layout.html > html > body > div.body-content
1  <!DOCTYPE html>
2  <html>
3      <head>
4          <meta charset="utf-8" />
5          <title>{% block title %}{% endblock %}</title>
6          {% load static %}
7          <link rel="stylesheet" type="text/css" href="{% static 'hello/site.css' %}" />
8      </head>
9
10     <body>
11         <div class="navbar">
12             <a href="{% url 'home' %}" class="navbar-brand">Home</a>
13             <a href="{% url 'about' %}" class="navbar-item">About</a>
14             <a href="{% url 'contact' %}" class="navbar-item">Contact</a>
15             <a href="{% url 'log' %}" class="navbar-item">Log Message</a>
16         </div>
17         <div class="body-content">
18             {% block content %}{% endblock %}
19             <hr />
20             <footer>
21                 <p>&copy; 2023</p>
22             </footer>
23         </div>
24     </body>
25 </html>
26
```

/hello/templates/hello/log_message.html

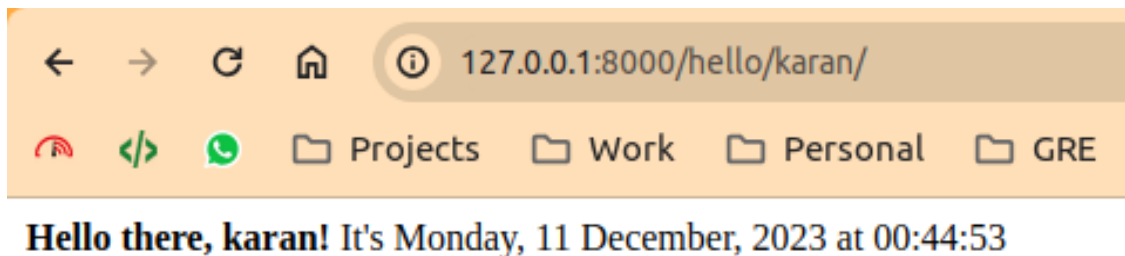
```
hello_django > hello > templates > hello > log_message.html > ...
1  {% extends "hello/layout.html" %} {% block title %} Log a message {% endblock %} {% block content %}
2  <form method="POST" class="log-form">
3      {% csrf_token %} {{ form.as_p }}
4      <button type="submit" class="save btn btn-default">Log</button>
5  </form>
6  {% endblock %}
7
```

Screenshots

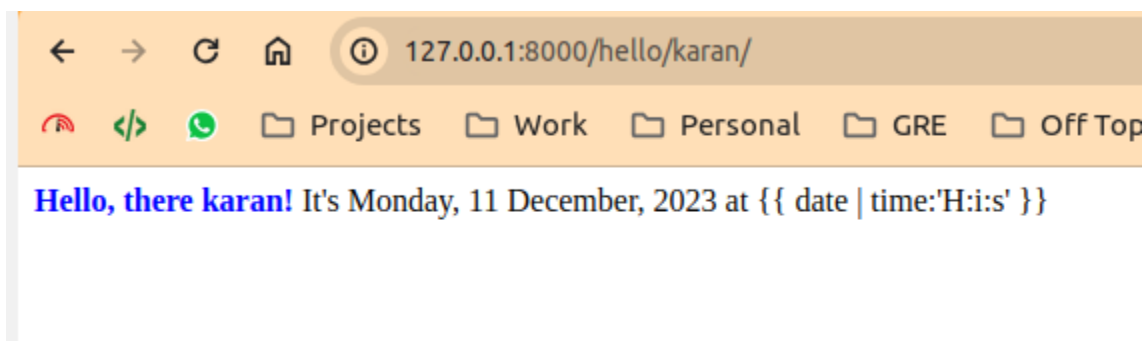
Screenshot showing name



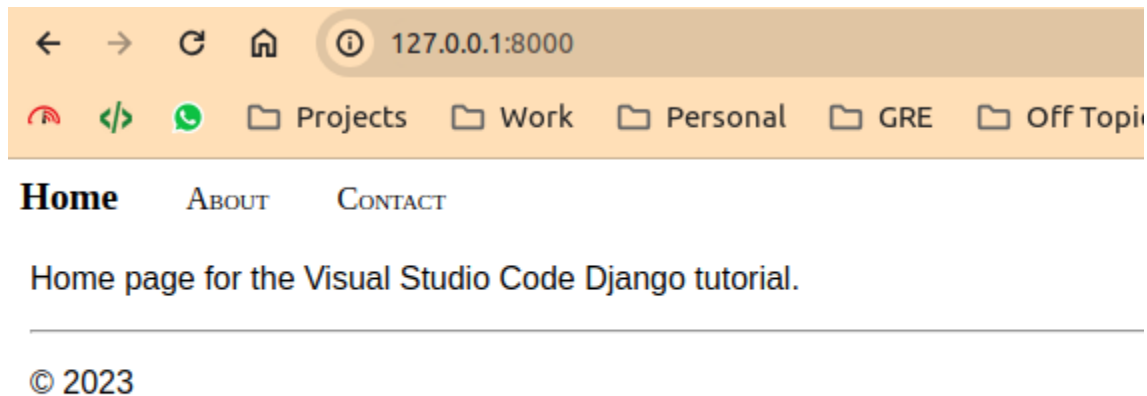
Screenshot fetching name from route



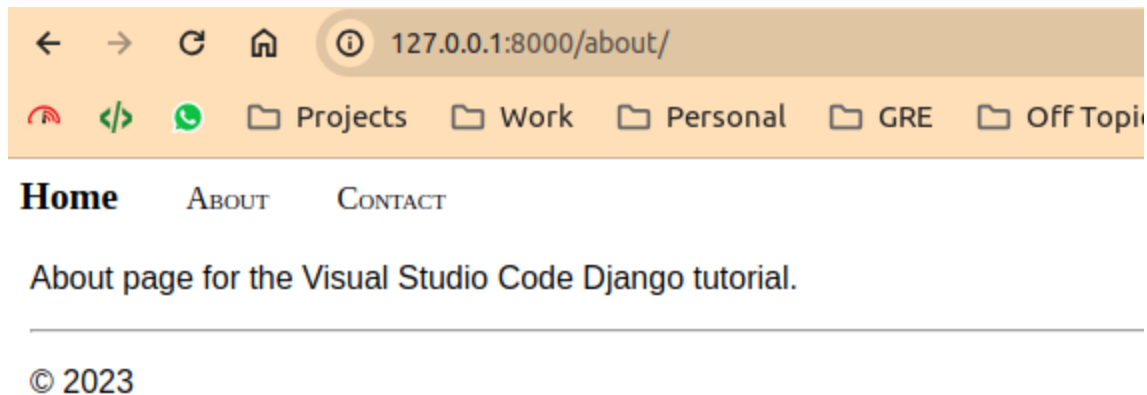
Screenshot showing name with CSS



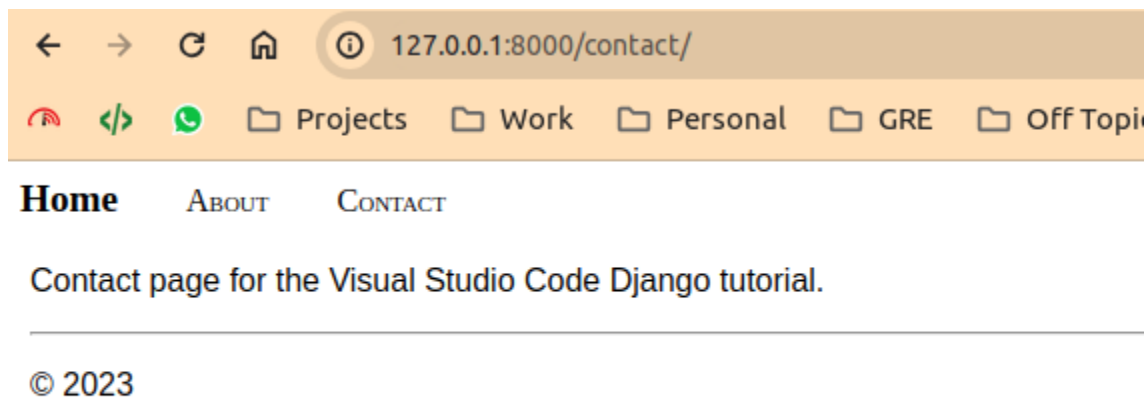
Screenshot with navbar - HOME



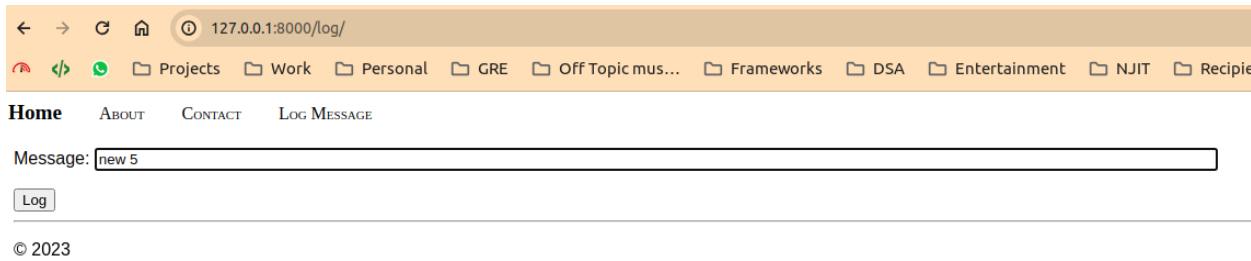
Screenshot with navbar - ABOUT US



Screenshot with navbar - CONTACT US



Screenshot showing Adding LOG_MESSAGE



Screenshot showing LOG_MESSAGES at HOME navbar

