Lab 3 –(Tasks 1–7)

Task 1: First view + URL mapping (core urls.py)

A) views.py (index)
from django.http import HttpResponse

def index(request):

   return HttpResponse("Hello, world!")

B) project urls.py
from django.contrib import admin

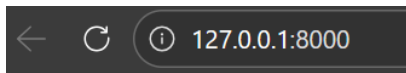from django.urls import path

from apps.bookmodule import views

urlpatterns = [

   path('admin/', admin.site.urls),

   path('', views.index),]

• http://127.0.0.1:8000/ → shows: Hello, world!

Screenshots:

Task 2: GET parameter (name)

views.py (index with GET parameter)
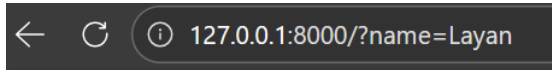from django.http import HttpResponse

def index(request):

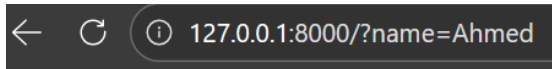   name = request.GET.get("name") or "world"

   return HttpResponse("Hello " + name)

     • http://127.0.0.1:8000/?name=Layan → Hello, Layan
       http://127.0.0.1:8000/?name=Ahmed → Hello, Ahmed

Screenshots :

Hello Layan

Hello Ahmed

Task 3: Second view + URL path parameter (index2/<int:val1>/)

views.py (index2)

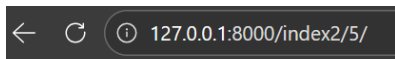from django.http import HttpResponse

def index2(request, val1=0):

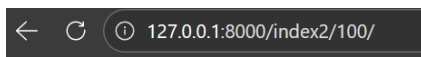   return HttpResponse("value1 = " + str(val1))

urls mapping for index2

path('index2/<int:val1>/', views.index2),

- http://127.0.0.1:8000/index2/5/ → value1 = 5
- http://127.0.0.1:8000/index2/100/ → value1 = 100

Screenshots:

value1 = 5
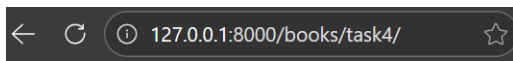

value1 = 100

Task 4: Create HTML template + render()

index.html (Task 4 content)

<h1>Hello from a template!</h1>

views.py (index using render)
def task4(request):

   return render(request, "bookmodule/index.html")

Screenshots:

Hello from a template!

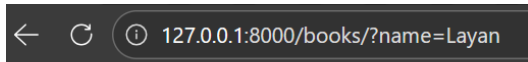## Task 5: Render variables in template (context)

index.html (Task 5)

<h1>Hello from {{ name }}!</h1>

views.py (index with context)
def index(request):

   name = request.GET.get("name") or "world"

   return render(request, "bookmodule/index.html", {"name": name})

Screenshots:

Hello from Layan!

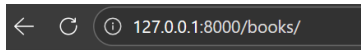## Task 6: App-level urls.py + include() in project urls.py

apps/bookmodule/urls.py

```
urlpatterns = [

    path('', views.index),

    path('index2/<int:val1>/', views.index2),

]
```
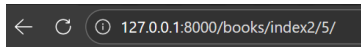
libraryproject/urls.py (include)
```
urlpatterns = [

    path('admin/', admin.site.urls),

    path('books/', include('apps.bookmodule.urls')),

]
```

Screenshots to include:

127.0.0.1:8000/books/

Hello from world!

127.0.0.1:8000/books/index2/5/

value1 = 5

Task 7: Book details page (URL + view + HTML)

views.py (viewbook)
```
from django.shortcuts import render

def viewbook(request, bookId):

    book1 = {'id': 123, 'title': 'Continuous Delivery', 'author': 'J. Humble and D. Farley'}

    book2 = {'id': 456, 'title': 'Secrets of Reverse Engineering', 'author': 'E. Eilam'}

    targetBook = None

    if book1['id'] == bookId:

        targetBook = book1
```

```python
        if book2['id'] == bookId:

            targetBook = book2

    context = {'book': targetBook}

    return render(request, 'bookmodule/show.html', context)
```

apps/bookmodule/urls.py
```python
path('<int:bookId>', views.viewbook),
```

show.html
```html
<h4>ID: {{ book.id }}</h4>

<h4>Title: {{ book.title }}</h4>

<h4>Authors</h4>

<p>{{ book.author }}</p>

<h4>Description</h4>

<p>Description here</p>
```
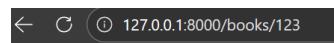
Screenshots:

127.0.0.1:8000/books/123

ID: 123

Title: Continuous Delivery

Authors

J. Humble and D. Farley

Description

Description here

127.0.0.1:8000/books/456
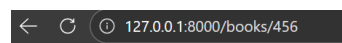
ID: 456

Title: Secrets of Reverse Engineering

Authors

E. Eilam

Description

Description here