

Explain template inheritance and template reusability. How do you include one Django template inside another using the `{% include %}` tag?

Template inheritance allows you to create a **base template** (with common layout elements like headers, footers, navbars) and extend it in child templates. This promotes DRY (Don't Repeat Yourself) principles.

### How It Works:

- **Base Template:** Defines the common structure and placeholders (using `{% block %}` tags).
- **Child Template:** Inherits from the base using `{% extends %}` and fills in the placeholders.

```
1  {% extends 'base.html' %}
2
3  {% block title %}Product List - Zamazor{% endblock %}
4
5  {% block content %}
6      <h2>Available Products:</h2>
7      <ul>
8          {% for product in products %}
9              <li>{{ product.name }} - ₹{{ product.price }}</li>
10             {% empty %}
11                 <li>No products available.</li>
12             {% endfor %}
13         </ul>
14     {% endblock %}
15
```

What is the proper way to display images stored in the media folder in a Django template?

## Django Media Configuration

To serve **user-uploaded files (media)**, configure the MEDIA\_URL and MEDIA\_ROOT in settings.py:

**settings.py**

```
1  import os
2
3  MEDIA_URL = '/media/' # URL to access media files
4  MEDIA_ROOT = os.path.join(BASE_DIR, 'media') # Directory to store uploaded files
5
```

## Serving Media Files (Development Only)

In urls.py, add this:

```
1  from django.conf import settings
2  from django.conf.urls.static import static
3
4  urlpatterns = [
5      # Your app URLs here
6  ]
7
8  if settings.DEBUG:
9      urlpatterns += static(settings.MEDIA_URL, document_root=settings.MEDIA_ROOT)
10
```

## Uploading and Displaying Images

Assume you've uploaded a product image at:  
media/products/laptop.jpg

### views.py

```
1 from django.shortcuts import render
2
3 def product_list(request):
4     products = [
5         {'name': 'Laptop', 'price': 75000, 'image': 'products/laptop.jpg'},
6         {'name': 'Smartphone', 'price': 35000, 'image': 'products/phone.jpg'}
7     ]
8     return render(request, 'shop/product_list.html', {'products': products})
9
```

### product\_list.html

```
1 {% load static %} ←!— Required if using static files as well →
2
3 <h2>Product List:</h2>
4 <ul>
5     {% for product in products %}
6         <li>
7             
8             <p>{{ product.name }} - ₹{{ product.price }}</p>
9         </li>
10    {% endfor %}
11 </ul>
12
```

## Proper Way to Display Media Files (Best Practice)

Instead of hardcoding MEDIA\_URL, use the MEDIA\_URL context processor or directly reference like this:

A code editor window with a dark background and three colored window control buttons (red, yellow, green) in the top left corner. It contains two lines of code. The first line is an HTML tag with attributes: src, alt, and width. The src and alt attributes use Django template syntax with curly braces and double braces to reference context variables. The width attribute is set to "200". The second line is empty.

```
1 
2
```