

| Package/<br>Method         | Description   | Code Example  |
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| <b>ListView:</b>           | Displays a list of objects.   | <pre>class MyListView(ListView):     model = MyModel     template_name = 'my_template.html'     context_object_name = 'object_list' # default: object_list</pre>  |
| <b>DetailView</b>          | Displays details of a single object.  | <pre>class MyDetailView(DetailView):     model = MyModel     template_name = 'my_template.html'     context_object_name = 'object' # default: object     pk_url_kwarg = 'my_model_id' # default: pk</pre> |
| <b>CreateView</b>          | Displays a form to create a new object.   | <pre>class MyCreateView(CreateView):     model = MyModel     template_name = 'my_template.html'     fields = '__all__' # or specify a list of fields</pre>  |
| <b>UpdateView</b>          | Displays a form to update an existing object.   | <pre>class MyUpdateView(UpdateView):     model = MyModel     template_name = 'my_template.html'     fields = '__all__' # or specify a list of fields     pk_url_kwarg = 'my_model_id' # default: pk</pre> |
| <b>DeleteView</b>          | Displays a confirmation page to delete an object.   | <pre>class MyDeleteView&gt;DeleteView):     model = MyModel     template_name = 'my_template.html'     success_url = '/success-url/'     pk_url_kwarg = 'my_model_id' # default: pk</pre>                 |
| <b>Basic View Function</b> | <p>Function-based view that returns "Hello, World!"</p> <p>From Django.http<br/>import<br/>HttpResponse</p> | <pre>def my_view(request):     # Your view logic here     return HttpResponse("Hello, World!")</pre>  |

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| <b>Render a Template</b>  | <p>Function-based view to render a template with context.</p> <p>From<br/>django.shortcuts<br/>import render</p>                                  | <pre>def my_template_view(request):     context = {'variable': value}     return render(request, 'my_template.html', context)</pre>   |
| <b>Redirect to a URL</b>  | <p>Function-based view to redirect to a specific URL.</p> <p>From<br/>django.shortcuts<br/>import redirect</p>                                    | <pre>def my_redirect_view(request):     return redirect('url_name_or_path')</pre>   |
| <b>Handle a Form Submission</b>   | <p>Function-based view to handle form submission.</p> <p>From<br/>django.shortcuts<br/>import render</p>  | <pre>def my_form_view(request):     if request.method == 'POST':         # Process the form data here     else:         # Display the form     return render(request, 'my_form_template.html', context)</pre>                       |
| <b>Handle URL Parameters</b>  | <p>Function-based view that accesses URL parameters.</p>  | <pre>def my_param_view(request, param):     # Access the 'param' value from the URL</pre>   |
| <b>Protecting Views (Restrict Access) using @login_required Decorator</b> | <p>Function-based view protected with login_required decorator.</p> <p>From<br/>django.contrib.auth.<br/>decorators import<br/>login_required</p> | <pre>@login_required def my_protected_view(request):     # Your view logic here</pre>   |
| <b>Bootstrap CSS</b>  | <p>Link to include Bootstrap CSS in the base template.</p>  | <p><b>Add the following link to the &lt;head&gt; section of your base template (usually base.html):</b></p> <pre>&lt;link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css" rel="stylesheet"&gt;</pre> |

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| <b>Bootstrap JavaScript</b>             | Script tag to include Bootstrap JavaScript library.  | <p>Include the Bootstrap JavaScript library at the end of the <code>&lt;body&gt;</code> section to enable certain features (for example, dropdowns, modals):</p> <pre>&lt;script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/js/bootstrap.min.js"&gt;&lt;/script&gt;</pre>      |
| <b>Bootstrap classes and components</b> | Create visually appealing and responsive web pages without having to write CSS styles manually.  | <pre>&lt;a href="#" class="btn btn-primary"&gt;Click Me&lt;/a&gt;</pre>  |
| <b>Configuration – Static files</b>     | Django settings for static files configuration.  | <p>In your Django settings (settings.py), define the following settings:</p> <pre>STATIC_URL = '/static/studio/edx.org-next/' # URL to access static files STATICFILES_DIRS = [os.path.join(BASE_DIR, 'static')] # Directory to look for static files</pre>                                |
| <b>Configuration – Installed apps</b>   | Defines a list of all the applications installed in the project.   | <p>Add 'django.contrib.staticfiles' to your <code>INSTALLED_APPS</code> in settings.py:</p> <pre>INSTALLED_APPS = [     # ...     'django.contrib.staticfiles',     # ... ]</pre>  |
| <b>Configuration – App Dirs</b>         | A configuration option used within the <code>TEMPLATES</code> setting. When set to <code>True</code> , Django will look for template files within the app directories. | <p>Make sure the <code>APP_DIRS</code> setting is set to <code>True</code> in the <code>TEMPLATES</code> list. This allows Django to look for static files within the apps' directories.</p> <pre>TEMPLATES = [     {         # ...         'APP_DIRS': True,         # ...     }, ]</pre> |

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| <b>Usage – Static content</b>  | Code to style the HTML templates and provide interactivity to web pages.                  | <pre> &lt;link href="{% static 'your_app/css/style.css' %}" rel="stylesheet"&gt; &lt;script src="{% static 'your_app/js/script.js' %}"&gt;&lt;/script&gt; &lt;img src="{% static 'your_app/img/logo.png' %}" alt="Logo"&gt; </pre> |
| <b>Collecting static files</b> | When deploying your project, you need to collect all static files into a single location. | <pre> python manage.py collectstatic STATIC_ROOT = os.path.join(BASE_DIR, 'staticfiles') </pre>  |