

What are views in Django? State the types of Views in Django.

1. Function-Based Views (FBV):

- Simple Python functions that take a request and return a response.
- Example:

A code editor window with a dark background and three colored window control buttons (red, yellow, green) in the top left corner. It contains Python code for a function-based view.

```
1 from django.http import HttpResponse
2
3 def home(request):
4     return HttpResponse("Welcome to Zamazor!")
5
```

2. Class-Based Views (CBV):

- Use Python classes to organize code, offering built-in generic views for common tasks like displaying lists or handling forms.
- Example:

A code editor window with a dark background and three colored window control buttons (red, yellow, green) in the top left corner. It contains Python code for a class-based view.

```
1 from django.views import View
2 from django.http import HttpResponse
3
4 class HomeView(View):
5     def get(self, request):
6         return HttpResponse("Welcome to Zamazor!")
7
```

What is the difference between render() and redirect() functions in Django views?

render():

- Renders an HTML template with context data.
- Returns an **HTTP response** with the rendered content.
- Used to display a web page.
- **Example:**

```
1 from django.shortcuts import render
2
3 def home(request):
4     return render(request, 'home.html', {'title': 'Zamazor'})
5
```

redirect():

- Redirects the user to a different URL.
- Returns an **HTTP redirect response (302)**.
- Used after form submissions or successful actions.
- **Example:**

```
1 from django.shortcuts import redirect
2
3 def go_to_home(request):
4     return redirect('home') # Redirects to the URL with name 'home'
5
```

How do you pass URL parameters to a Django view

Using URL Patterns:

- Define parameters in urls.py using angle brackets (< >).
- Access them in the view via function arguments.

Example:

urls.py

```
1 from django.urls import path
2 from . import views
3
4 urlpatterns = [
5     path('product/<int:id>/', views.product_detail, name='product_detail'),
6 ]
7
```

views.py

```
1 from django.http import HttpResponse
2
3 def product_detail(request, id):
4     return HttpResponse(f"Product ID: {id}")
5
```