Django Function-Based Views (FBV) Notes

# 1. What is a Function-Based View (FBV)?

A Function-Based View is simply a Python function that takes an HTTP request and returns an HTTP response. It is the most basic way of writing views in Django. Each view function must accept at least one argument: request.

# 2. Steps to Create a Function-Based View

## A. Create a View in views.py (Inside App)

from django.http import HttpResponse  
from django.shortcuts import render  
  
# Basic FBV returning plain text  
def home(request):  
 return HttpResponse("<h1>Welcome to the Home Page</h1>")  
  
# FBV using template  
def about(request):  
 context = {  
 'title': 'About Page',  
 'description': 'This is the about page using Function-Based View.'  
 }  
 return render(request, 'about.html', context)

## B. Create Templates (Optional if using render)

<!DOCTYPE html>  
<html>  
<head>  
 <title>{{ title }}</title>  
</head>  
<body>  
 <h2>{{ title }}</h2>  
 <p>{{ description }}</p>  
</body>  
</html>

## C. Map View to URL

1. Create urls.py inside the app (if not already):

from django.urls import path  
from . import views  
  
urlpatterns = [  
 path('', views.home, name='home'), # http://127.0.0.1:8000/blog/  
 path('about/', views.about, name='about'), # http://127.0.0.1:8000/blog/about/  
]

2. Include app's urls.py in the project urls.py:

from django.contrib import admin  
from django.urls import path, include  
  
urlpatterns = [  
 path('admin/', admin.site.urls),  
 path('blog/', include('blog.urls')), # Include blog app's URLs  
]

# 4. FBV with Different HTTP Methods (GET & POST)

from django.shortcuts import render  
from django.http import HttpResponse  
  
def contact(request):  
 if request.method == 'POST':  
 name = request.POST.get('name')  
 return HttpResponse(f"Thank you, {name}, your form is submitted!")  
 return render(request, 'contact.html')

<form method="POST">  
 {% csrf\_token %}  
 <input type="text" name="name" placeholder="Enter your name" required>  
 <button type="submit">Submit</button>  
</form>

urlpatterns = [  
 path('contact/', views.contact, name='contact'),  
]

# 5. Key Points of Function-Based Views

1. Simple and easy to understand.  
2. Perfect for small applications.  
3. Each view handles one functionality.  
4. Use if request.method == 'POST' or 'GET' to handle multiple HTTP methods in the same view.