

## What is view and why it is used in Django?

In Django, a view is a Python function that takes a web request and returns a web response. It is responsible for processing the request and returning the appropriate data or rendering a template. Views are the heart of any web application built with Django, as they handle the business logic and user interactions.

Django views are Python functions that takes http requests and returns http response, like HTML documents.

A web page that uses Django is full of views with different tasks and missions. Views are usually put in a file called views.py file.

Eg:

```
from django.shortcuts import render  
  
from django.http import HttpResponse  
  
def members(request):  
  
    return HttpResponse("Hello world!")
```

The view is a python function which is used to perform some business logic and return a response to the user.

Views in Django serve multiple purposes:

They are responsible for rendering templates. Django templates provide a flexible and efficient way to separate the design of the interface from the business logic.

1. They can handle forms, which is an important aspect of user interaction in a web application.

They can return API data, making Django a versatile framework for developing RESTful APIs.

Views are used in Django to:

1. Handle different URL patterns: Each view is associated with a specific URL pattern, and when a request is made to that URL, the corresponding view function or class is executed.
2. Retrieve data from models: Views interact with Django models to retrieve, update, or delete data from the database.

2. Process form submissions: Views handle form submissions, validate user input, and process data sent via HTTP POST requests.
3. Generate dynamic content: Views pass data to templates to generate dynamic HTML pages or other types of responses.

Django Views are one of the vital participants of MVT Structure of Django. As per Django Documentation, A view function is a Python function that takes a Web request and returns a Web response. This **response** can be the HTML contents of a Web page, or a redirect, or a 404 error, or an XML document, or an image, anything that a web browser can display.

Django views are part of the user interface — they usually render the HTML/CSS/Javascript in your Template files into what you see in your browser when you render a web page.