

General Outline

How Django handles a request in a loop can be broken like this

- First, when a request is received, it parses the HTTP request as we have learned.
- It checks if the url requests anything, such as /index, /forum (meaning that it has to process an entire url)
 - If the url has any paths, it will pull up the corresponding HTML for that. It will also call the function that is supposed to handle this path. For example, in our code, when you go to '/', the function in views.py that handles that request is called index.
 - If the url has HTML to be served, it will serve the HTML. If the HTML is also generic, Django has a built in HTML Template engine that follows a format such as {% request.user %}, similar to Jinja. You can fill the context that Django needs by writing Python code that will return the data to Django.
 - It will send a valid HTTP response, along with all the files requested, and it will send everything from HTML, JS, images, etc.
- Django also handles the database. You can directly interface with the database (and it works best with SQL databases) using the Django ORM. You can write pythonic code that gets translated into SQL statements, and all of these SQL statements are also properly guarded and sanitized.
- Django also has its own support for security features. Things like Cross site scripting (XSS), CSRF (cross site request forgery), sql injection, are guarded from by Django.
- Django also has its own built-in User class. You can add additional functionality by overriding the default definition. We added a little bit to the user class by extending it to also contain a UserProfile. Django can also allow for easy checks of whether a user is logged in or not when they send data (or request data) from the server. On this note, it can also handle user authentication natively with its own registration form, and login form.

<https://github.com/jason-kuang/cse312/blob/develop/forum/views.py>

<https://docs.djangoproject.com/en/3.2/topics/security/>

<https://github.com/django/django>