

**WORKING WITH FILES AND EXCEPTIONS IN PYTHON**

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**Abstract.** *This article gives you an overview of why to choose Django over any other framework. Django is a high-level Python framework by using it the development speed will be faster and cleaner. Django is built by the much more experienced people, so it takes care of the web development process in easier way. With takes care of much of the hassle of web development, so we can focus on writing our app without needing to reinvent the wheel.*

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There are many advantages of python such as it charts in the recent years over other programming languages and widely used by programmers. Python has undergone a drastic change since its release 25 years ago as many add-on features are introduced. Many of the software development companies prefer language because of its versatile features and clean and neat programming codes. Python has many characteristic features like it is Interactive, Interpreted, Modular, Dynamic, Object oriented, Portable and the list goes so on.

There is much to be said about the advantages of Python. It has been the most popular development language in the recent years and it continues to be favourite among many skilled developers. But let's narrow our focus to why Django framework in specific.

A. Reasons for “Why Django is better than any other framework!”

1. Benefit to the customer:

In case something requires you to change your development team mid-way through your project , Django allows you to find a new team that can comprehend

the projects architecture with very little effort. This can save a lot of time and money

### 2. Benefit to the developer:

Even if the project is developed by one team from start to finish, using Django makes the development process remarkably quickly, from idea to release through to launch and production. With transparent, clean code, development can be both efficient and effective. And we all know that time = money.

This is why Django is considered “the web framework for perfectionists with deadlines.” It allows any developer to quickly grasp the project’s structure and gives them the tools they need to implement any idea and develop it properly, and in record time.

### 3. Django is Fast:

This has been designed in a way to help the developers make an application as fast as possible. From idea, production to release, Django helps in making it both cost effective and efficient. Thus it becomes an ideal solution for developers having a primary focus on deadlines.

### 4. Django is Secure:

When you are doing it in Django, it is ensured that developers don’t commit any mistakes related to security. Some of the common mistakes include SQL injection, cross-site request forgery, clickjacking and cross-site scripting. To manage effectively usernames and passwords, the user authentication system is the key.

### 5. Django is flexible:

Content management, scientific computing platforms, and even big organizations, all these aspects are very efficiently managed by the use of Django.

## **B. Contents:**

### 1. The very first step:

Before we use Django, Python should be installed, and if we have no background knowledge on Python then Python is the one which we should learn first. Eventually being a python Web framework Django requires Python.

### 2. Install Django:

We'll get three easy options to install Django

- Installing an official release. This is the best approach for most users.
- Installing a version Django provided by our operating system distribution.
- Install the latest development version. This option is for enthusiasts who want the latest-and-greatest features and aren't afraid of running brand new code. You might encounter new bugs in the development version, but reporting them helps the development of Django. Also, releases of third-party packages are less likely to be compatible with the development version than with the latest stable release.

### 3. The Model-View-Controller design pattern:

- MVC has been around as a concept for a long time, but has seen exponential growth since the advent of the Internet because it is the best way to design client-server applications. All of the best web frameworks are built around the MVC concept. At the risk of starting a flame war, I contest that if you are not using MVC to design web apps, you are doing it wrong. As a concept, the MVC design pattern is really simple to understand:

- The **model(M)** is the representation of our data. Where it is not an actual data, but an interface to the data. The model will help us in pulling the data from the database.

- The **view(V)** is going to be the front end (what we see in the screen). It is the presentation layer of our model.

- The **controller(C)** is which will control the flow between model and view. Controller is basically the backend logic (Business Logic) which we write.

- Django also follows the MVC pattern similarly, but it follows its own logic while implementing. Because the “C” is handled by the framework itself

and most excitement in Django happens in the models, templates and views. As I mentioned it will it's own logic while implementing, which means Django will follow **MTV** pattern where,

- **M stands for “Model”** which is normally the data accessing layer. This layer contains about data only. how to validate it, which behaviours it has, and the relationships between the data.
- **T stands for “Template”** which is front end. It is the presentation layer.
- **V stands for “View”** which will control the flow between model and template. View is layer where we write our business logic.

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