Django Framework

The Django is a high-level Python framework that helps in the rapid development and clean, pragmatic design, django makes it easier to build applications more quickly, efficiently and with less code. Django is used for creating the User Interface (UI) for the application. The UI created by Django is easy to use so that the person which are from the non-technical field can also use the application for the prediction of disease without going anywhere any saving time and money.

Advantages of Django

Here are few advantages of using Django which can be listed out here:

@ Object-Relational Mapping (ORM) Support: The django framework provides a connection between the data model and the database engine, and supports a large set of database engines systems including MySQL, Oracle, Postgres, etc. Django also supports NoSQL database through Django-nonrel fork. For now, the only NoSQL databases supported are MongoDB and google app engine.

@ Multilingual Support: The django supports multilingual websites through its built-in internationalization system. So you can develop your website, which would support multiple languages.

@ Framework Support: The django has built-in support for Ajax, RSS, Caching and various other frameworks.

@ Administration GUI: The django provides a nice ready-to-use user interface for administrative activities.

@ Development Environment: The django comes with a lightweight web server to facilitate end-to-end application development and testing.

Django Working

As you already know django is a Python web framework and like most modern framework, Django supports the MVC pattern. First let's see what is the Model-View-Controller (MVC)

pattern, and then we will look at Django's specificity for the Model-View-Template (MVT) pattern.

MVC Pattern: When talking about applications that provides UI (web or desktop), we usually talk about MVC architecture. And as the name suggests, MVC pattern is based on three components: Model, View, and Controller.

DJANGO MVC - MVT Pattern: It is slightly different from MVC. In fact the main differ- ence between the two patterns is that Django itself takes care of the Controller part (Software Code that controls the interactions between the Model and View), leaving us with the template.The template is a HTML file mixed with Django Template Language (DTL). The following figure 1.1 illustrates how each of the components of the MVT pattern interacts with each otherto serve a user request: This is how the django works in the development of the application,

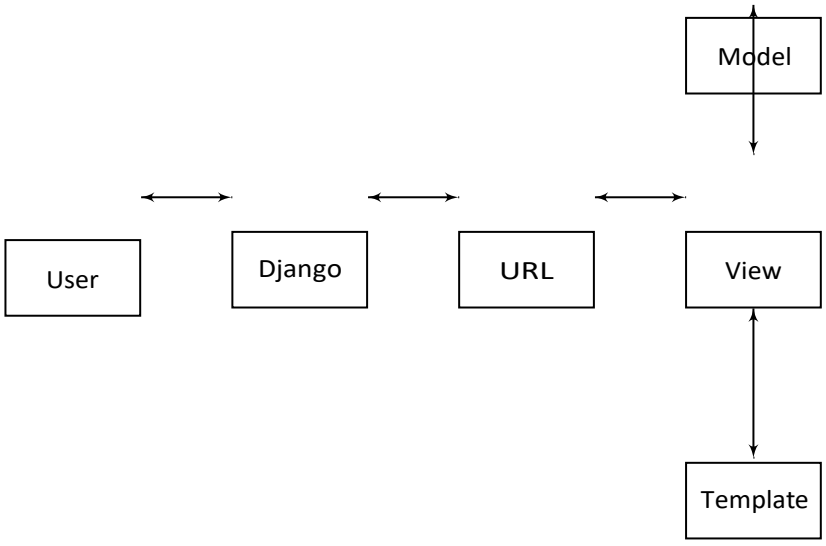

Figure 1.1: Components Of MVT

the migrations are used in django to provide the schema to the database and django also has itsintegrated web server so that the application does not face any system configuration problem allthese things are controlled by manage.py file in the django project which also helps in creatingthe web server.