

# Assignment-Module – 5 (DB and Python Framework)

## 1. Why Django should be used for web-development? Explain how you can create a project in Django?

-> Django is the best framework for web applications, as it allows developers to use modules for faster development. As a developer, you can make use of these modules to create apps, websites from an existing source. It speeds up the development process greatly, as you do not have to code everything from scratch.

-> Create project

1. Install Django: `pip install django`
2. Create a Django Project: `django-admin startproject myproject`
3. Run the Development Server: `python manage.py runserver`
4. Create Django Apps:-`python manage.py startapp myapp`
5. Define Models
6. Write Views
7. Define URLs
8. Create Templates
9. Run Migrations:`python manage.py makemigrations`  
`python manage.py migrate`
10. Test Your Application.

## 2. How to check installed version of django?

-> `python -m django --version`

## 3. Explain what does `django-admin.py` make messages command is used for?

-> The `django-admin.py` make messages command is used to generate or update language translation files (.po files) for Django projects. These translation files contain translation strings extracted from Django templates and Python source code.

## 4. What is Django URLs?make program to create django urls.

-> In Django, URLs are patterns used to map URLs to views within a web application. The URL patterns are defined in the `urls.py` module of each Django app, and they determine which view function or class-based view should be called for a given URL.

-Create a Django App: `python manage.py startapp myapp`

-Define URL Patterns

-Map URLs to Views

-Include App URLs in Project URLs

-from `django.urls` import `path`

from `.` import `views`

```
urlpatterns = [  
    path('', views.home, name='home'),  
    path('about/', views.about, name='about'),  
    path('contact/', views.contact, name='contact'),  
]  
from django.shortcuts import render  
from django.http import HttpResponseRedirect
```

```
def home(request):  
    return HttpResponseRedirect("Home Page")
```

```
def about(request):  
    return HttpResponseRedirect("About Page")
```

```
def contact(request):
    return HttpResponse("Contact Page")
from django.contrib import admin
from django.urls import path, include

urlpatterns = [
    path('admin/', admin.site.urls),
    path('myapp/', include('myapp.urls')),
]
```

## 5. What is a QuerySet? Write program to create a new Post object in database:

-> A QuerySet is a collection of data from a database.

A QuerySet is built up as a list of objects.

QuerySets makes it easier to get the data you actually need, by allowing you to filter and order the data at an early stage.

**# models.py**

```
from django.db import models
```

```
class Post(models.Model):
    title = models.CharField(max_length=100)
    content = models.TextField()
    created_at = models.DateTimeField(auto_now_add=True)

    def __str__(self):
        return self.title
```

## 6. Mention what command line can be used to load data into Django?

-> To load data into Django you have to use the command line **Django-admin.py loaddata**. The command line will searches the data and loads the contents of the named fixtures into the database.

**7. Explain what does `django-admin.py` make messages command is used for?**

-> It performs administrative tasks related to Django, such as starting a Django project or creating a new Django app. It can also execute management commands offered by Django or third-party packages.