

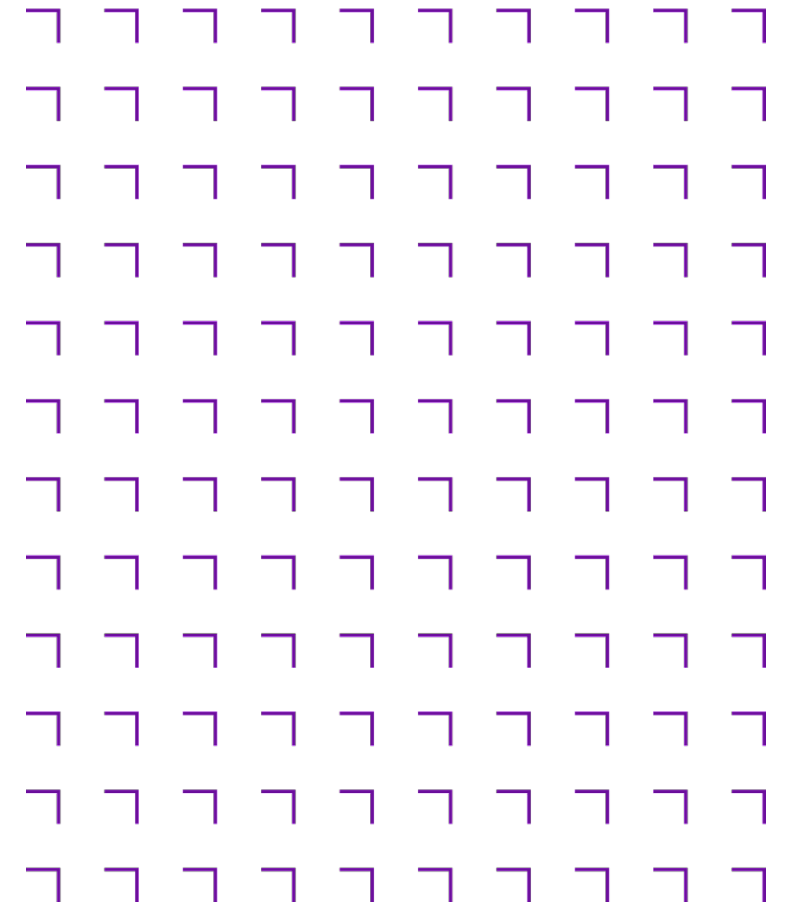
Django

Installation / Create App and Routes

Course Outline

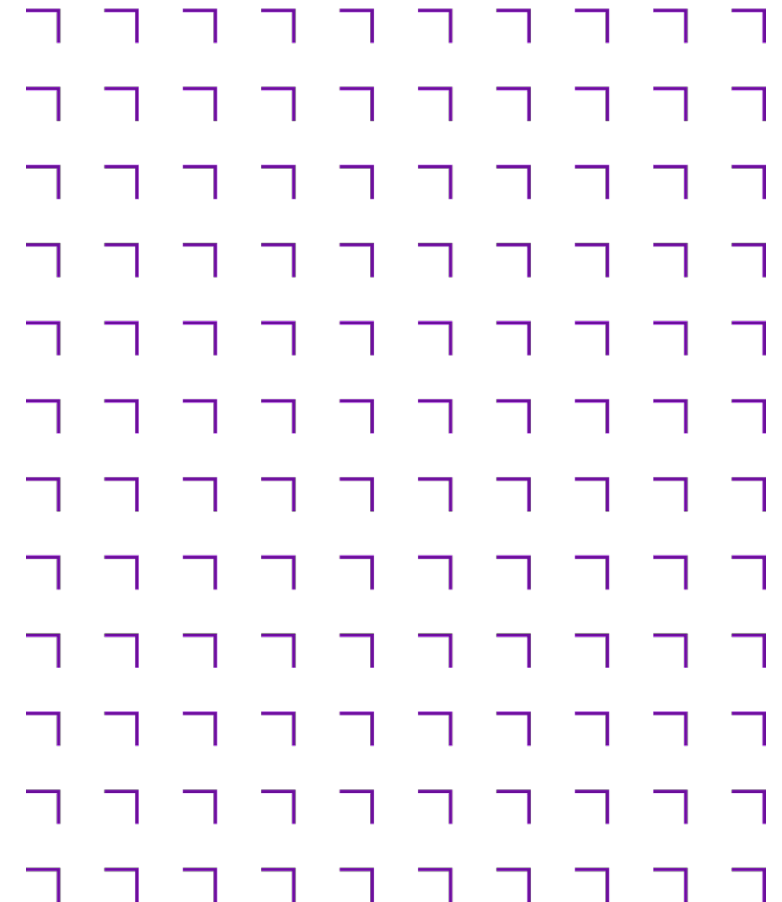


1. Django Installation
2. Django Create App and Routes
3. Django Templates and Styling
4. Django Admin Page
5. Django Databases
6. Django User Registration
7. Django User Authentication
8. Django Profile Info and Picture
9. Django Update User and Profile
10. Django CRUD
11. Django Pagination
12. Django Password Reset
13. Django Deployment
14. Django Summary
15. React Introduction
16. React Components



- Frameworks Project
 - 12%

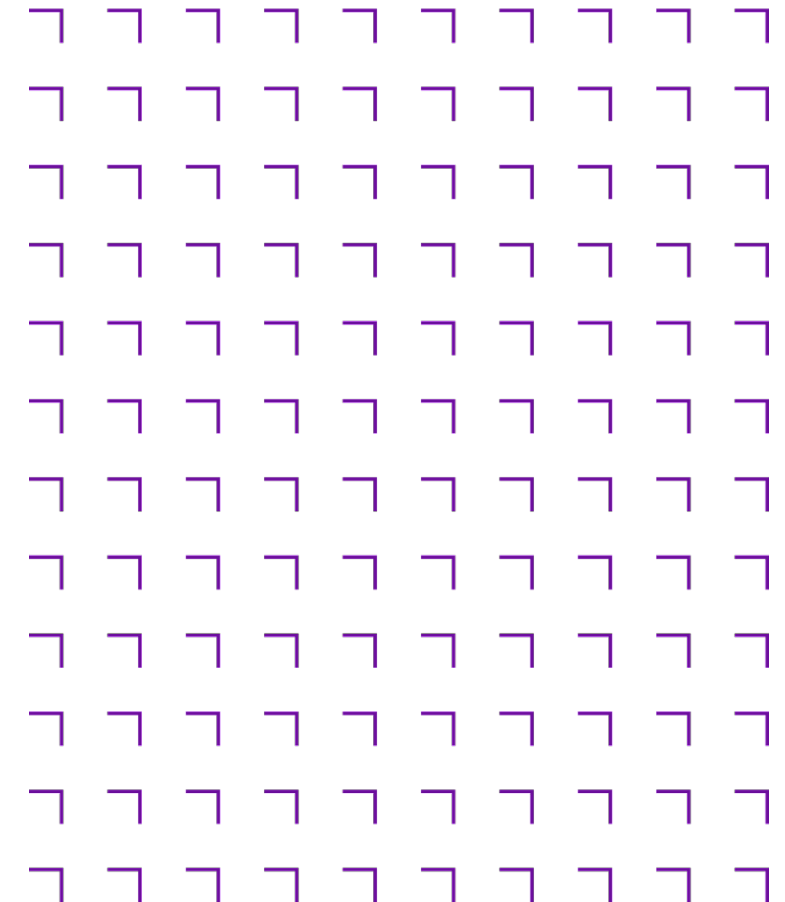
Assessment



Django Week 1



In This Unit

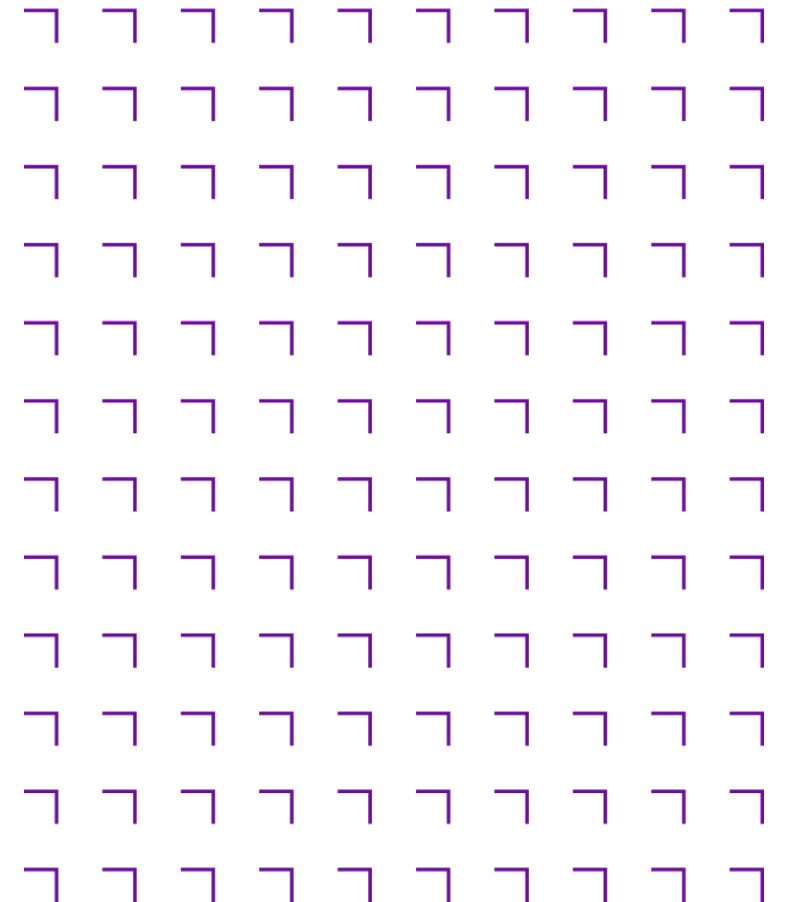


Title	Timing
Lecture	30:00
Break	15:00
Live Examples	60:00
Labs	60:00
Q&A	15:00

Week 1

- Django Installation Options
- Django Project Template
- Creating a Django Application
- Define a View
- Configure URLs
- Include App URLs
- Run the Development Server

Learning Outcomes



Introduction

- Django is a powerful web framework for building web applications using Python.
- Installation is the first step to get started with Django development.
- In this presentation, we will present the installation process.
- In the walkthrough, we will go through it hands on.



Installation Options

```
// Check if boxer is already active, return false if so
if ($("#boxer").length > 0) {
    return;
}

// Kill event
_killEvent(e);

// Cache internal data
data = $.extend({}, {
    $window: $(window),
    $body: $("body"),
    $target: $target,
    $object: $object,
    visible: false,
    resizeTimer: null,
    touchTimer: null,
    gallery: {
        active: false
    }
});
```

- Option 1
- Using pip
(Python Package Manager)
- Option 2
- Using virtualenv
(Recommended)

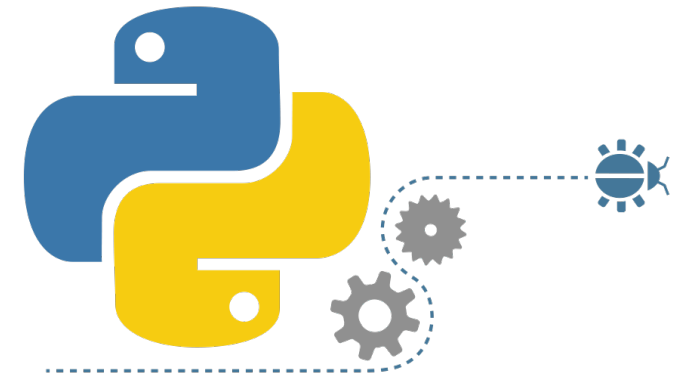
Using Django Project Template

- Django provides a project template for quick setup.
- Create a new directory for your project
- Navigate to the newly created directory
- Use the Django project template
- Django files will be generated, and you can start working on your project.



Creating a Django Application

- A Django application is a self-contained component of a Django project, designed to handle specific functionalities.
- A brief overview of the steps.
 - Create a Django Application
 - Define a View
 - Configure URLs for the Application
 - Include App URLs in the Project
 - Run the Development Server



Create a Django Application

- Open the terminal or command prompt.
- Navigate to the root directory of your Django project.
- Run the command
 - `python manage.py startapp your_app_name`
- Django will create a new directory named "your_app_name" containing the basic application structure.

Define a View

- Inside your newly created app directory, locate the "views.py" file.
- Define a view function to handle a specific URL pattern.
- The view function takes a request as an argument and returns an HTTP response.

```
from django.http import HttpResponse

def hello(request):
    return HttpResponse("Hello, Django!")
```

Configure URLs for the Application

- In the app directory, create a new file named "urls.py" (if it doesn't already exist).
- Define URL patterns for the application by associating them with corresponding view functions..

```
from django.urls import path
from . import views

urlpatterns = [
    path('', views.home, name='blog-home'),
    path('about/', views.about, name='blog-about'),
]
```

Include App URLs in the Project

- In the project's main "urls.py" (located in the main project directory), import "include" from "django.urls".
- Include the app's URL patterns in the project's URL patterns using "include".

```
from django.contrib import admin
from django.urls import path, include

urlpatterns = [
    path("admin/", admin.site.urls),
    path('register/', user_views.register, name='register'),
    path('profile/', user_views.profile, name='profile'),
]
```

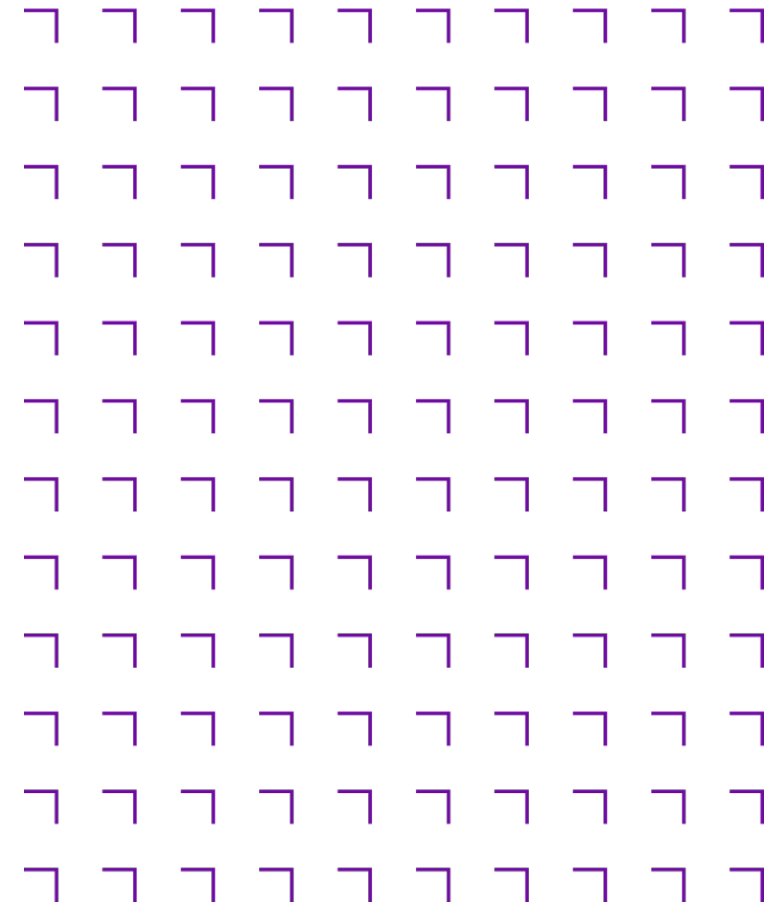
Run the Development Server

- To test the application, run the development server with the command
- `python manage.py runserver`
- Output in CLI below
 - Django version 4.2.3, using settings 'django_project.settings'
 - Starting development server at <http://127.0.0.1:8000/>
- Go to local host and view app

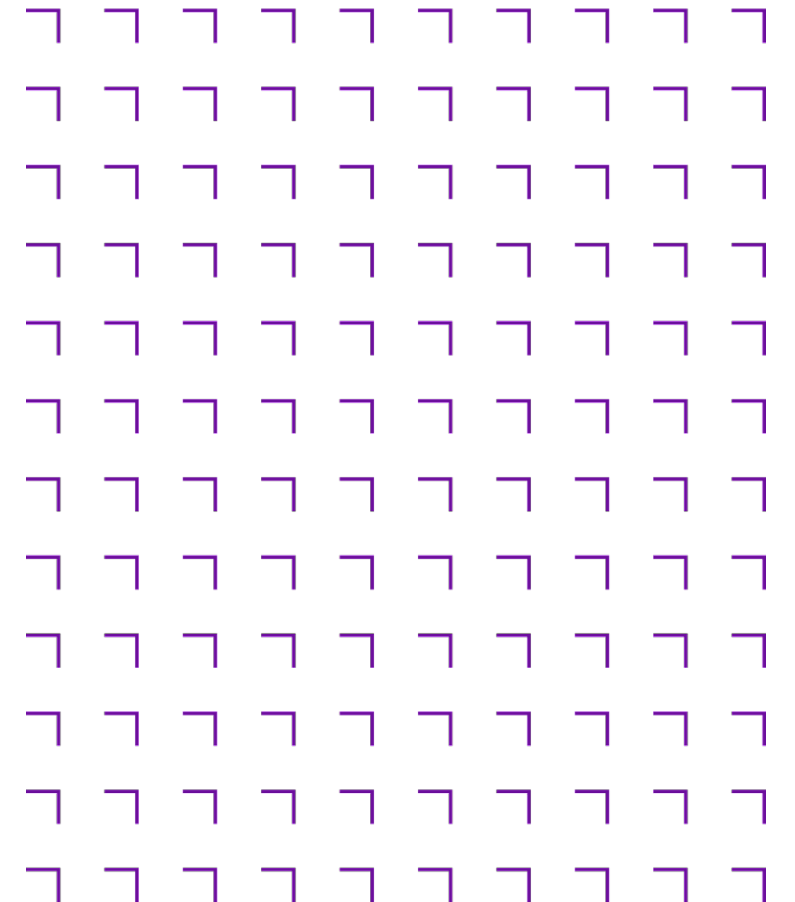
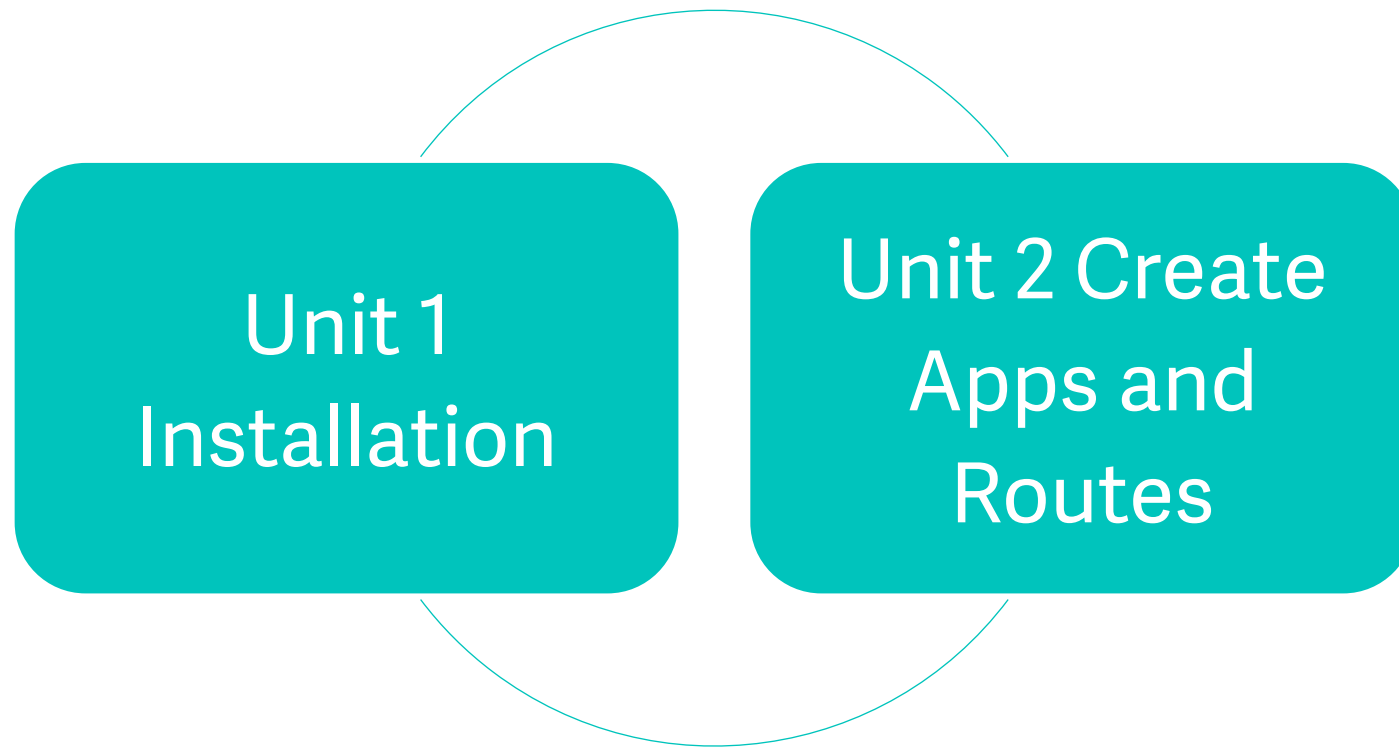
Summary



- Django Installation Options
- Django Project Template
- Creating a Django Application
- Define a View
- Configure URLs
- Include App URLs
- Run the Development Server



Walkthrough



Break



Back in 15 minutes

