# 6. Project and App Creation

## **Steps to create a Django project and individual apps within the project.**

A Django website consists of a single **Project** (the overall container) and one or more **Apps** (modular components for specific functionalities).

| Step | Action | Command | Result |
| --- | --- | --- | --- |
| **0. Setup** | Ensure you have Django installed and your virtual environment is active. | pip install django | - |
| **1. Create Project** | Create the main project directory and settings. | django-admin startproject my\_website | Creates the project structure, including the initial my\_website/ folder and manage.py. |
| **2. Navigate** | Change into the project's root directory. | cd my\_website | - |
| **3. Create App** | Create an application within the project (e.g., for a 'blog' feature). | python manage.py startapp blog | Creates a blog/ folder with app-specific files like models.py and views.py. |
| **4. Register App** | Open my\_website/settings.py and add the new app to the **INSTALLED\_APPS** list. | - | Django now recognizes the blog app. |

## **Understanding the role of manage.py, urls.py, and views.py.**

| File | Location | Primary Role |
| --- | --- | --- |
| **manage.py** | Project root | A command-line utility for interacting with the Django project. It's used for administrative tasks like running the development server (runserver), migrating the database (migrate), and creating a superuser (createsuperuser). |
| **urls.py** | Project and App folders | The **URL Router** or **URLconf**. It defines the patterns that map specific web addresses (URLs) to the corresponding **View** functions that should handle the request. The project's urls.py usually directs traffic to the app-level urls.py. |
| **views.py** | App folder | The **Request Handler** and core logic component. It receives the HTTP request, processes the business logic (which often involves retrieving or saving data via the Models), and returns an HTTP response, typically by rendering an HTML template. |