1. Steps to push a Django project to GitHub.

Ans. Steps to Push a Django Project to GitHub : -

1. Prerequisites

Before proceeding, ensure the following:

You have a GitHub account (Sign up at github.com if needed).

Git is installed on your system (Check using git --version in the terminal).

2. Initialize Git in the Django Project

Navigate to your Django project directory in the terminal and run:

git init

This initializes an empty Git repository in the project folder.

3. Create a .gitignore File

A .gitignore file tells Git which files and folders to exclude from version control. Create a .gitignore file in the project root and add the following recommended Django exclusions:

# Virtual Environment

venv/

env/

# Byte-compiled / Cache files

\_\_pycache\_\_/

\*.pyc

\*.pyo

# Secret files

\*.sqlite3

.env

# Django migrations

migrations/

# Static & Media files

staticfiles/

media/

# IDE Configurations

.vscode/

.idea/

This prevents unnecessary files from being committed.

4. Add and Commit the Project Files

After setting up .gitignore, add all files to Git and commit the changes:

git add .

git commit -m "Initial commit"

This stages all files and commits them with a message.

5. Create a New Repository on GitHub

Go to GitHub and log in.

Click on the New Repository button.

Enter a repository name (e.g., my-django-project).

Keep it public or private as needed.

Click Create Repository.

6. Link Local Git to GitHub Repository

After creating the repository, GitHub provides a remote URL. Connect your local project to GitHub by running:

git remote add origin https://github.com/your-username/my-django-project.git

Replace your-username and my-django-project with your GitHub username and repository name.

7. Push the Project to GitHub

Upload your local commits to GitHub using:

git branch -M main

git push -u origin main

This pushes the project to the main branch of the GitHub repository.

8. Verify on GitHub

Go to your repository on GitHub and refresh the page. Your Django project files should now be visible.

9. Updating the Repository (Future Changes)

Whenever you make changes in your Django project, use these commands to update GitHub:

git add .

git commit -m "Updated feature X"

git push origin main

This ensures that all changes are saved and pushed to the remote repository.