

# Django

## Intended Audience

This Django Training Course is for Python programmers who want to learn the best and most-widely used framework for developing Python-based Web applications.

## Prerequisites

[Advanced Python](#)

## After this course you should be able to

Quickly start a new Django project and establish a strong foundation for a growing site

- Define how your data is organized and create a SQLite database to manage it
- Quickly produce HTML with Django templates
- Create dynamic webpages with Django's URL patterns and views, including function views, class-based views, and generic views
- Enable efficient, reliable data input with Django Forms and custom form validations
- Understand the Model-View-Controller (MVC) architecture, compare it to Model-Template-Views, and gain a holistic understanding of Django's structure
- Write as little code as possible, simplify code reuse, and mitigate software decay by adhering to the Don't Repeat Yourself paradigm.
- Dive into Django source code to troubleshoot problems
- Extend site functionality with Django's contributed library
- Protect your site with user authentication and permissions
- Avoid security pitfalls such as SQL Injection, XSS, and CSRF

- Optimize site performance
- Develop complete Python-based Web applications from start to finish in Django.

## Course Material

Supplied

## Course Contents

# DAY 1

- Set Up
  - The Command Line
  - Install Python 3 on Mac OS X ([click here for Windows or Linux](#))
  - Install Python 3 on Windows
  - Install Python 3 on Linux
  - Virtual Environments
  - Install Django
  - Install Git
  - Text Editors
  - Conclusion
- Hello World app
  - Initial Set Up
  - Create an app
  - Views and URLConfs
  - Hello, world!
  - Git
  - Bitbucket
  - Conclusion
- Pages app
  - Initial Set Up
  - Templates
  - Class-Based Views
  - URLs
  - Add an About Page

- Extending Templates
- Tests
- Git and Bitbucket
- Local vs Production
- Heroku
- Additional Files
- Deploy
- Conclusion

## DAY 2

- Message Board app
  - Initial Set Up
  - Create a database model
  - Activating models
  - Django Admin
  - Views/Templates/URLs
  - Adding new posts
  - Tests
  - Bitbucket
  - Heroku configuration
  - Heroku deployment
  - Conclusion
- Blog app
  - Initial Set Up
  - Database Models
  - Admin
  - URLs
  - Views
  - Templates
  - Static files
  - Individual blog pages
  - Tests
  - Git
  - Conclusion
- Forms

- Forms
- Update Form
- Delete View
- Tests
- Conclusion

## DAY 3

- User Accounts
  - Log in
  - Updated homepage
  - Log out link
  - Sign up
  - Bitbucket
  - Heroku config
  - Heroku deployment
  - Conclusion
- Custom User Model
  - Set Up
  - Custom User Model
  - Forms
  - Superuser
  - Conclusion
- User Authentication
  - Templates
  - URLs
  - Admin
  - Conclusion

## DAY 4

- Bootstrap
  - Pages app
  - Tests
  - Bootstrap

- Sign Up Form
- Next Steps
- Password Change and Reset
  - Password Change
  - Customizing password change
  - Password reset
  - Custom Templates
  - Conclusion
- Email
  - SendGrid
  - Custom emails
  - Conclusion

## DAY 5

- Newspaper app
  - Articles app
  - URLs and Views
  - Edit/Delete
  - Create page
  - Conclusion
- Permissions and Authorization
  - Improved CreateView
  - Authorizations
  - Mixins
  - LoginRequiredMixin
  - UpdateView and DeleteView
  - Conclusion
- Comments
  - Model
  - Admin
  - Template
  - Conclusion

### Duration and pricing

- [In Pricing Group A](#)

## Certificate

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## Schedule

On the calendar on this page below.

If your browser doesn't display the calendar below, please click on [this link](#) or try using [Google Chrome](#), alternatively please enquire via our 'Contact Us' page.

## Bookings

You can download the course registration form on our home page or by clicking [here](#)

## Brochure

You may download a pdf copy of this page by [clicking here](#).

## Questions

Please [email us](#)

We are a member of the Python Software Foundation

