## 12-Week Full-Stack Coding Study Plan (React + Python/Django)

Time Commitment: 15–30 min/day on weekdays, 1 hour/day on weekends

**Goals**: - Learn to build full-stack apps using React and Django. - Be able to spin up simple websites. - Understand basic infrastructure: deployment, databases, backend/frontend architecture.

#### Week 1: HTML & CSS + Simple Websites

Day	Task
Mon	Learn HTML Basics: MDN Intro to HTML
Tue	Learn CSS Basics: MDN Intro to CSS
Wed	Flexbox and Grid: Flexbox Froggy, CSS Grid Garden
Thu	Build a basic personal profile page
Fri	Learn Responsive Design: FreeCodeCamp Responsive Tutorial
Sat	Project: Create a 1-page website for a fictional local business
Sun	Deploy site to Netlify or Vercel

#### Week 2: Git + React Basics

Day	Task
Mon	Learn Git & GitHub: <u>Git Handbook</u>
Tue	Set up GitHub & push code from VS Code: GitHub Docs
Wed	Intro to React: React Official Tutorial
Thu	Learn JSX & Components
Fri	Learn Props & State
Sat	Project: Build a simple React counter or to-do app
Sun	Add styling with CSS modules or plain CSS

#### **Week 3: React Continued**

Day	Task
Mon	Learn React Events and Handlers

Day	Task
Tue	React Forms: <u>React Forms Guide</u>
Wed	Learn Conditional Rendering
Thu	Learn Lists and Keys
Fri	Learn useEffect: <u>useEffect Explained</u>
Sat	Project: Build a recipe app or book list app
Sun	Add responsive design & deploy to Vercel

### Week 4: Review Week 1

Day	Task
Mon	Review HTML/CSS concepts + MDN Docs
Tue	Rebuild your profile/landing page from scratch
Wed	Review Git & GitHub + Push an old project
Thu	Review React basics: components, props, state
Fri	Add a feature to one of your React projects
Sat	Polish and redeploy a site or app
Sun	Rest or explore <u>Frontend Mentor</u> challenges

# Week 5: Python Refresher + Django Basics

Day	Task
Mon	Review Python Syntax: <u>W3Schools Python</u>
Tue	Learn Virtual Environments: Python Venv Docs
Wed	Install Django + start project
Thu	Understand Django Project vs App Structure
Fri	Create Models and Migrations
Sat	Create admin panel and test CRUD
Sun	Project: Build a blog backend (no frontend yet)

# Week 6: Django Continued

Day	Task
Mon	Views and Templates
Tue	URL routing & Namespaces
Wed	Static files and template inheritance
Thu	Forms and user input
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Fri	Create authentication system (login/signup)
Fri Sat	Create authentication system (login/signup) Project: Add login/auth to your blog

## Week 7: Django REST Framework (DRF)

Day	Task
Mon	Intro to APIs + Install DRF: <u>DRF Quickstart</u>
Tue	Build first API View + Serializer
Wed	API CRUD for your blog posts
Thu	Learn viewsets and routers
Fri	Add token authentication
Sat	Project: Expose your blog backend as API
Sun	Test API with Postman or Insomnia

### Week 8: Review Week 2 (Django + DRF)

Day	Task
Mon	Review Django models and views
Tue	Review templates, forms, and auth
Wed	Review DRF views, serializers, and routers
Thu	Polish and clean up your blog project
Fri	Add one feature (e.g. comments or tags)
Sat	Deploy your Django app on Render or Railway

Day	Task
Sun	Rest or write a blog post about what you learned

## Week 9: Connecting React + Django API

Day	Task
Mon	Learn how frontend talks to backend (HTTP requests)
Tue	Learn Axios or Fetch: <u>Axios Docs</u>
Wed	Set up React app to fetch blog posts from Django API
Thu	Create frontend login + token handling
Fri	Display fetched data in React (posts, users)
Sat	Project: Build blog frontend w/ login, create, update, delete posts
Sun	Polish styling and error handling

## Week 10: Infrastructure, Databases, Deployment

Day	Task
Mon	How the Web Works: MDN Overview
Tue	Learn how databases work (PostgreSQL): Intro to SQL
Wed	How Django connects to PostgreSQL
Thu	Learn about env files and config best practices
Fri	Learn CI/CD basics: GitHub Actions Overview
Sat	Deploy full-stack app (frontend on Vercel, backend on Render/Railway)
Sun	Add Google Analytics or a contact form

# Week 11: Final Full-Stack Project

Day	Task
Mon	Plan your app: e.g. Habit Tracker, Notes App, Task Board
Tue	Set up backend models and API

Day	Task
Wed	Set up frontend project
Thu	Build core features end-to-end
Fri	Add auth, update, and delete
Sat	Polish design + responsiveness
Sun	Deploy both ends + write a README

#### Week 12: Review + Showcase

Day	Task
Mon	Review full-stack project code
Tue	Fix bugs, clean code
Wed	Push final version to GitHub
Thu	Write a project blog post or case study
Fri	Share on LinkedIn, Dev.to, or Twitter
Sat	Optional stretch project or hackathon prep
Sun	Rest + Reflect on 12 weeks

# **Recommended Tools**

Code: <u>VS Code</u>, <u>Replit</u>
Design: <u>Figma</u>, <u>Heroicons</u>
Deployment: <u>Vercel</u>, <u>Render</u>
APIs: <u>Postman</u>, <u>Insomnia</u>

• Hosting: GitHub Pages, Netlify

Let me know if you'd like a printable version (PDF or Google Doc) or if you'd like this plan adapted for Notion or another tool.