HOW SOFTWARE WORKS · BEGINNER · 13 MIN READ

# Hosting, domains and Vercel

How an app gets from your laptop to a real web address: hosting, deploys, previews, domains and DNS.

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https://digitalbuilders757.com/university/study/hosting-domains-and-vercel

## What hosting means

Hosting is renting space on computers that are always on and connected, so your site or app is reachable by anyone, any time. Your laptop sleeps; a host doesn't.

Modern hosts for web apps (Vercel, Netlify, Cloudflare, Render and others) do much more than store files. They build your code, run your server functions, serve pages fast from many locations (a CDN) and give you HTTPS automatically.

## Deploys, previews and production

A deploy is one published version of your app. With Git-connected hosting, every push creates a deploy automatically.

On Vercel, pushes to your production branch (usually main) create production deployments on your real domain. Other branches and pull requests get preview deployments: a private, shareable copy at its own address, so you can test before anything reaches real users. If a release goes wrong you can roll back to an earlier deploy.

## Domains and DNS

A domain is your site's name, like digitalbuilders757.com. You rent it yearly from a registrar.

DNS (the Domain Name System) is the internet's address book. It turns a name into the address of the computers serving it. Connecting a domain to a host means adding a couple of DNS records the host gives you. Changes can take minutes to hours to spread.

HTTPS (shown by the padlock) encrypts traffic between visitors and your site using an SSL/TLS certificate. Good hosts issue and renew it for you.

## Environment variables and logs

Your host stores environment variables (database URLs, API keys) separately for development, preview and production. Set them in the host's dashboard, never in the code. After changing one, redeploy so the app picks it up.

When a deploy fails or a page errors, the build logs and runtime logs say why. Copy the exact error into your AI tool; it's the single most useful debugging habit.

## Key terms

**Hosting**
Renting always-on computers so your site or app is reachable by anyone.

**Deploy**
Publish a version of your app to a host.

**Preview deployment**
A private, shareable copy of a branch or pull request for testing.

**Production**
The live version real users see.

**Vercel**
A hosting platform for web apps that deploys from GitHub with previews for every branch.

**Domain**
Your site's name, like digitalbuilders757.com, rented from a registrar.

**DNS**
The internet's address book that turns domain names into server addresses.

**HTTPS / SSL**
Encryption between visitors and your site, shown by the padlock.

**CDN**
A network of servers worldwide that serves your files from close to each visitor.

**Environment variable**
A setting or secret the app reads at run time, kept outside the code.

**Logs**
Records of what happened during a build or while the app ran, including errors.

**Rollback**
Switching production back to an earlier deploy when a release goes wrong.

**Serverless function**
Back-end code the host runs on demand, without you managing a server.

## Try it: Ship a page to the internet

1. Push any small project (or a builder export) to a GitHub repo.
2. Import the repo into Vercel (free Hobby plan) and deploy.
3. Make a branch, change one word, push, and open the preview deployment link.
4. Merge to main and watch production update.

KNOWLEDGE CHECK

# Hosting, domains and Vercel

5 questions. Circle one answer for each; 4 or more correct passes. Answers are at the back.

### 1. What is a preview deployment?

A. A private, shareable test copy of a branch at its own address
B. A screenshot of every page that Vercel emails to you after each deploy
C. Your live site
D. A paid ad

### 2. What does DNS do?

A. Encrypts traffic between visitors and your site
B. Turns a domain name into the address of the computers serving it
C. Stores your passwords
D. Hosts your website's files

### 3. Where should an API key for your production app be stored?

A. In the page's HTML, hidden with CSS so visitors can't see it
B. In a comment in your code, so only developers will ever see it
C. As an environment variable in the host's settings
D. In the README

### 4. On Vercel, what usually happens when you push to the production branch (main)?

A. Nothing happens until you click deploy in the dashboard
B. Your repository is archived as a backup
C. Only a preview is created, which you then copy to production by hand
D. Your live site is redeployed

### 5. Your deploy failed. What's the most useful first step?

A. Read the build logs and give the exact error to your AI tool
B. Delete the project and redeploy it from scratch
C. Buy a new domain
D. Redeploy a few times until it passes

## Official sites

Vercel: https://vercel.com
Vercel docs: Environments: https://vercel.com/docs/deployments/environments
MDN: What is a domain name?: https://developer.mozilla.org/en-US/docs/Learn_web_development/Howto/Web_mechanics/What_is_a_domain_name

Last reviewed 2026-11-25. AI tools change fast; check each tool's own site for current features, plans and prices.

ANSWER KEY

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**1. A: A private, shareable test copy of a branch at its own address**
Previews let you test changes in a real environment before they reach users.

**2. B: Turns a domain name into the address of the computers serving it**
DNS is the internet's address book.

**3. C: As an environment variable in the host's settings**
Secrets belong in environment variables, never in code.

**4. D: Your live site is redeployed**
Production-branch pushes create production deployments; other branches get previews.

**5. A: Read the build logs and give the exact error to your AI tool**
Logs tell you why. Exact errors get exact fixes.