# **LAMP Stack**

LAMP is a classic open-source stack used for building and running dynamic websites and web applications. The name comes from the first letters of its four key components.

1. Linux — the operating system layer that everything else runs on. It provides the foundation, file system, and security environment.

2. Apache — the web server software that listens for HTTP requests from users’ browsers and serves back web pages or data.

3. MySQL — the relational database that stores and manages data for the application. Some setups use MariaDB, a MySQL-compatible alternative.

4. PHP — the server-side scripting language that processes application logic, interacts with the database, and outputs HTML to users. Some variations replace PHP with Python or Perl.

Here’s the thing LAMP works because each layer does one job well and they integrate cleanly. Linux keeps the system stable, Apache handles traffic, MySQL keeps data organized, and PHP glues it together so pages can be dynamic and interactive.

Why it matters:  
 • It’s free and open-source.  
 • Well-documented and widely supported.  
 • Runs everything from blogs to enterprise web apps.  
 • Flexible enough to customize for specific needs.

In short, LAMP is still popular because it’s proven, cost-effective, and puts full control in the hands of developers.