DDT _ Data Dose Tech

Back End Content

📌 **Stage 1: Backend Fundamentals (PHP & OOP)**

🐘 **1. PHP From Scratch**

- ✍️ **Syntax, Variables, Loops, Functions**
- 📫 **Super globals ($_GET, $_POST, $_SESSION)**
- 📁 **File Handling (Upload, Read/Write)**

🧱 **2. Object-Oriented Programming (OOP)**

- 🧩 **Classes, Objects, Inheritance**
- 🧬 **Traits, Interfaces, Autoloading**
- 📁 **Namespaces, Composer (Package Management)**

📌 **Stage 2: Laravel Framework**

🌿 **1. Laravel Basics**

- 🏛️ **MVC Architecture**
- 🧭 **Routing, Controllers, Middleware**
- 🎨 **Blade Templating**
- 📦 **Eloquent ORM (CRUD Operations)**

🚀 **2. Advanced Laravel**

- 🔐 **Authentication (Sanctum, Passport)**
- 🔌 **API Development (RESTful APIs, Postman Testing)**
- 🧵 **Queues & Jobs (for slow/background tasks)**
- 🎧 **Events & Listeners**

📌 **Stage 3: Databases (MySQL)**

- 🗺️ **Database Design: Normalization, ER Diagrams**
- 🧮 **SQL Queries: JOINs, Subqueries, Indexing**
- ⚡ **Performance Optimization: Query Tuning, Caching (Redis)**

📌 **Stage 4: Security & Deployment**

🔐 **1. Application Security**

- ❤️‍🩹 **OWASP Top 10 (SQL Injection, XSS, CSRF)**
- 🔒 **Laravel Security (Validation, Hashing, Encryption)**
- 🌐 **HTTPS, CORS, Secure Headers**

🚀 **2. Deployment**

- 🏢 **Shared Hosting vs** 🖥️ **VPS (AWS, DigitalOcean)**
- 🐳 **Docker Basics**
- ⚙️ **CI/CD (GitHub Actions, Laravel Forge)**

📌 **Stage 5: Practical Projects**

- 🔗 **RESTful API (Laravel + React)**
- 🔏 **Authentication System (JWT, OAuth2)**
- 💬 **Real-time Chat App (Laravel + WebSockets)**

📚 Resources

- *Laravel Docs •PHP The Right Way •CS50 (Harvard)*