



# How to Build, Run, and Test the Attendance System

This guide explains what to do **after you download the project** or already have it in a folder on your computer.

Follow each step in order, and you'll have the system running in a few minutes.

## 1. Install the Required Software

Make sure these tools are installed on your computer:

- **PHP 8.2 or newer**
- **Composer** (manages PHP packages)
- **Node.js 18+** and **npm**
- **MySQL** (the project uses a SQL database)

## 2. Open the Project Folder

After downloading or unzipping the project:

1. Right-click inside the folder
2. Choose **Open Terminal / Command Prompt / PowerShell**
3. You should now be in the same folder where you see:
  - **artisan**
  - **composer.json**
  - **/app**
  - **/resources**, etc.

## 3. Create a MySQL Database

The system needs its own database.

You can create one using **phpMyAdmin** or the **MySQL command line**.

Create a database named:

**attendance\_db**

(You can use any name, just remember to put the same name in `.env`.)

Recommended settings:

`utf8mb4_unicode_ci`

## 4. Set Up the .env File

Inside the project folder:

If `.env` does not exist, create it by copying the example:

`Run => cp .env.example .env`

Now open `.env` in any text editor and update these lines:

```
APP_NAME="Attendance System"  
APP_ENV=local  
APP_URL=http://127.0.0.1:8000  
APP_DEBUG=true
```

**Set your MySQL details:**

```
DB_CONNECTION=mysql  
DB_HOST=127.0.0.1  
DB_PORT=3306  
DB_DATABASE=attendance_db      # database name you created  
DB_USERNAME=root              # your MySQL username  
DB_PASSWORD=                  # your MySQL password (if you have one)
```

Most XAMPP users have:

- Username: `root`
- Password: `(empty)`

## 5. Install Backend & Frontend Dependencies

Run these commands inside the project folder:

`Run => composer install`

`Run => npm install`

These will download all the libraries the project needs.

## 6. Generate the App Key

**Run => `php artisan key:generate`**

## 7. Create the Tables

This will build all required tables in your MySQL database:

**Run => `php artisan migrate`**

## 8. Fill the Database with Demo Data

This creates example records and the default admin account.

**Run => `php artisan db:seed`**

*Then run*

**Run => `php artisan db:seed --class=AuthUserSeeder`**

*You will get*

### ✓ Admin Login (default)

Email: Drtongsreng@gmail.com

Password: Admin@1234

## 9. Build the Frontend Assets

**Run => `npm run build`**

(Or `npm run dev` if you're developing and want hot-reload.)

## 10. Run the Application

Start the Laravel development server:

**Run => `php artisan serve`**

You'll see something like:

`http://127.0.0.1:8000`

Open that link in your browser and log in using the admin account.