

# Yes, You Still Can:

## How to Build a Website with ChatGPT

This guide walks you step-by-step through building your own functional, secure, and local listing marketplace using HTML, CSS, PHP, and MySQL - with the help of ChatGPT. Based on a real-world project, it's packed with hands-on examples, tested code, and real admin tools.

If you're new to web development or system setup, don't worry - each step includes beginner-friendly code and explanation.

## Installing the LAMP Stack (Linux, Apache, MySQL, PHP)

#### Why LAMP?

LAMP is the environment where your PHP files will run, store data in MySQL, and be served to browsers using Apache.

You'll need to install these before any website files will work properly.

#### Install Commands (Ubuntu-based systems)

Run the following commands in your terminal:

sudo apt update sudo apt install apache2 sudo apt install mysql-server sudo apt install php libapache2-mod-php php-mysql

Then test Apache by visiting: http://localhost/

#### After LAMP Is Installed

- Make sure Apache is running: sudo systemctl status apache2
- Make sure MySQL is running: sudo systemctl status mysql
- Place your project files in: /var/www/html/marketplace/

# Yes, You Still Can:

## How to Build a Website with ChatGPT

This guide walks you step-by-step through building your own functional, secure, and local listing marketplace using HTML, CSS, PHP, and MySQL - with the help of ChatGPT. Based on a real-world project, it's packed with hands-on examples, tested code, and tips you won't find elsewhere.

## 1. What You'll Build

#### **Marketplace Overview**

You'll build a simple web app where people can register, post items (for sale or free), search listings by location, and message sellers. It includes email verification, reCAPTCHA, a Node-style admin panel, and Google Maps integration.

## 2. Tools You'll Need

#### **Essentials**

- A Linux or Windows PC
- Apache, PHP 8.3, MariaDB (LAMP stack)
- A text/code editor (VS Code, Sublime, etc.)
- ChatGPT Plus (for assistance!)
- Web browser for testing
- Gmail SMTP or SendGrid for emails

## 3. Folder & File Structure

### **Root Directory Structure**

Your root directory (e.g., /var/www/html/marketplace/) should look like this:

- config.php
- login.php
- register.php
- verify.php
- post\_form.php
- listings.php
- message.php
- styles.css
- images/
- uploads/
- js/
- admin.php
- contact\_form.php
- search\_by\_location.php

## 4. MySQL Database Structure

### Users Table (users)

```
CREATE TABLE users (
id INT AUTO_INCREMENT PRIMARY KEY,
username VARCHAR(100) NOT NULL,
email VARCHAR(100) NOT NULL UNIQUE,
password VARCHAR(255) NOT NULL,
verification_code VARCHAR(255),
is_admin BOOLEAN DEFAULT 0,
reset_token VARCHAR(255),
reset_expires DATETIME,
created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

### Listings Table (listings)

```
CREATE TABLE listings (
id INT AUTO_INCREMENT PRIMARY KEY,
user_id INT,
title VARCHAR(150),
description TEXT,
price DECIMAL(10,2),
category ENUM('For Sale', 'Free', 'Wanted', 'Service'),
location VARCHAR(100),
latitude DECIMAL(10, 6),
longitude DECIMAL(10, 6),
image VARCHAR(255),
created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
FOREIGN KEY (user_id) REFERENCES users(id)
```

);

### Messages Table (messages)

CREATE TABLE messages ( id INT AUTO\_INCREMENT PRIMARY KEY, listing\_id INT, sender\_id INT, receiver\_id INT, message TEXT, sent\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP, FOREIGN KEY (listing\_id) REFERENCES listings(id), FOREIGN KEY (sender\_id) REFERENCES users(id), FOREIGN KEY (receiver\_id) REFERENCES users(id));

## 5. PHP File Walkthroughs

### register.php (User Signup)

- Shows a registration form with input fields: name, email, password, confirm password.
- Validates input, checks for existing users in the database.
- Hashes the password with password\_hash().
- Sends email verification using PHPMailer.
- Stores a unique verification code in the database.

## verify.php (Email Verification)

- Handles clicking of verification link from the user's email.
- URL includes the verification code (?code=...).
- Looks up the code in the users table.
- If matched, sets verification\_code = NULL and activates the account.
- Shows a message: "Your email has been verified. You can now login."

## login.php (User Login + reCAPTCHA)

- Displays login form with email and password.
- Checks reCAPTCHA token server-side.
- Fetches user by email, checks hashed password.
- If not verified, redirects with error: "Please verify your email first."
- If failed multiple times, user is locked out temporarily.
- On success, creates session and redirects to profile.php.

## post\_form.php (Submit New Listing)

- Shows form for users to post a new item/service.
- Accepts title, description, category, location, and image.
- Uses Google Maps API to geocode address to lat/lng.
- Saves image to uploads/ folder and stores filename in DB.

- Inserts listing into listings table with timestamp and user\_id.

## 6. How to Actually Do It - File by File

### - File: register.php

Location:

/var/www/html/marketplace/

Code Summary:

- Collects name, email, and password
- Validates input
- Saves user to database with a verification code
- Sends a verification email

#### **Test Instructions:**

- 1. Open browser and visit: http://localhost/marketplace/register.php
- 2. Fill out form and click register.
- 3. You should see a success message saying to check your email.

#### Troubleshooting:

- If the form doesn't load: check Apache is running.
- If email doesn't send: verify SMTP credentials in config.php
- Make sure your file ends with .php (not .html!)

### - File: verify.php

Location: /var/www/html/marketplace/

Code Summary:

- Handles the "click to verify" link from email
- Checks the token and activates the user

- 1. Click the link sent to your email after registration.
- 2. You should see a message saying email verified.

- If nothing happens: check if ?code=... is in the URL
- Make sure verification\_code column in database is not NULL before clicking

### - File: login.php

Location:

/var/www/html/marketplace/

Code Summary:

- Displays login form
- Validates reCAPTCHA
- Checks user credentials
- Starts session

**Test Instructions:** 

- 1. Visit: http://localhost/marketplace/login.php
- 2. Enter email and password.
- 3. If successful, redirects to profile.php.

Troubleshooting:

- If blocked, check user is verified (verification\_code is NULL)
- If login fails silently, check session\_start() is at the top
- If reCAPTCHA fails, double-check your secret key and site key

### - File: post\_form.php

Location:

/var/www/html/marketplace/

Code Summary:

- Lets users post item listings
- Accepts title, description, image, and location
- Stores listing in database

Test Instructions:

- 1. Login and visit: http://localhost/marketplace/post\_form.php
- 2. Fill out the form and click Submit.
- 3. Check listings.php for your posted item.

Troubleshooting:

- If image doesn't upload: check permissions on uploads/ folder
- If location map doesn't work: verify your Google Maps API key is correct

## 7. More Key Files Explained

### - File: listings.php

Location:

/var/www/html/marketplace/

Code Summary:

- Displays a list of recent items (filtered by last 14 days).
- Can include filters like keyword, category, and location.
- Uses a loop to show listings from the database.

**Test Instructions:** 

- 1. Visit: http://localhost/marketplace/listings.php
- 2. You should see the latest items posted by users.

Troubleshooting:

- If page is blank: check for SQL errors in query.
- If images don't show: verify uploads/ folder path is correct.

### - File: messages.php

Location:

/var/www/html/marketplace/

#### Code Summary:

- Shows inbox of user messages (sent and received).
- Displays listing title, sender/receiver, and timestamps.

- 1. After sending a message, visit: http://localhost/marketplace/messages.php
- 2. You should see a table of messages related to your listings.

- If nothing shows: check message records exist for this user\_id.
- Make sure you're logged in before accessing this file.

### - File: message.php

Location:

/var/www/html/marketplace/

#### Code Summary:

- Used to send a message to the owner of a listing.
- Requires a valid listing\_id and seller\_id.
- Inserts a message into the messages table.

#### **Test Instructions:**

- 1. Click "Message Seller" on a listing.
- 2. Fill out and submit the form.
- 3. Message should be saved and visible in messages.php.

#### Troubleshooting:

- If it says "Invalid IDs": ensure both IDs are passed in URL.
- If no form appears: double-check the GET parameters.

### - File: search\_by\_location.php

Location:

/var/www/html/marketplace/

Code Summary:

- Lets users search listings near a specific address or city.
- Uses Google Maps API to geocode and compare distances.
- Returns listings within the given radius.

- 1. Open: http://localhost/marketplace/search\_by\_location.php
- 2. Type your city or address and press search.
- 3. Results should display items nearby.

- If map doesn't show: verify Google Maps JS API key.
- If no results appear: try a wider search radius or different address.

## 8. Admin Tools & Configuration

### - File: admin.php

Location:

/var/www/html/marketplace/

Code Summary:

- Displays all registered users and item listings.
- Includes search filters and bulk actions.
- Admin can enable/disable/delete users and listings.
- Useful for moderation and platform safety.

**Test Instructions:** 

- 1. Login as admin and visit: http://localhost/marketplace/admin.php
- 2. Search for a user or listing, try disabling a user.

Troubleshooting:

- If buttons don't work: check form method and button names.
- If nothing displays: ensure you're logged in as an admin.

### - File: admin\_tools.php

Location:

/var/www/html/marketplace/

Code Summary:

- Provides quick admin actions like:
  - Delete expired or old posts
  - Trigger site/database backup
- Visual dashboard layout with button actions.

- 1. Login as admin and visit: http://localhost/marketplace/admin\_tools.php
- 2. Try viewing expired posts, then delete them.

- If no expired items show: test with expired date manually in DB.
- If backups fail: check write permissions on /backups or /uploads

## - File: config.php

Location:

/var/www/html/marketplace/

Code Summary:

- Stores site-wide constants and credentials:
  - DB host, user, password, DB name
  - SMTP settings for PHPMailer
  - Google reCAPTCHA site and secret key

**Best Practices:** 

- Use require\_once to include this in every PHP file.
- Never expose this file publicly.
- Always keep a backup.

Example Constants:

define('DB\_HOST', 'localhost');

define('DB\_NAME', 'marketplace');

define('SMTP\_USER', 'you@example.com');

define('SMTP\_PASS', 'password123');

## 9. Learn to Write Code: Beyond This Guide

#### **Option A: Learn by Copy + Edit**

One of the best ways to learn coding is by editing real, working code. Since you now have a complete project that runs in your browser, you can:

- Open any file (e.g. login.php) and change some text like <h2>Login</h2> to <h2>Welcome Back!</h2>

- Open styles.css and change a color code like #007bff to #28a745 (green).

- Remove or add new fields and test how it behaves.

- Use your browser's Developer Tools (right-click > Inspect) to view live HTML/CSS and make edits.

- Add new echo statements in PHP to display messages based on condition.

Every small change gives you real-time feedback and helps you learn faster than any course.

#### **Option B: Mini Lab - Build a Contact Card Page**

Try building your first new file from scratch:

1. Create a new file in your project folder called myinfo.php

2. Add this inside:

<html>
<head><title>My Info</title></head>
<body>
<h2>My Contact Card</h2>
Name: Your Name
Skills: HTML, PHP, CSS
</body>
</html>

3. Save and visit http://localhost/marketplace/myinfo.php

- 4. Now, try adding your picture using <img src="images/yourphoto.jpg" width="150" />
- 5. Use CSS to make it look nicer by editing styles.css or adding <style>...</style> block.

This simple page builds your confidence and shows you how to start coding your own ideas.

### **Option C: What to Learn Next (Resources & Roadmap)**

Once you've built your first real site, you're ready to learn more at your own pace.

#### HTML/CSS:

- https://htmlreference.io
- https://www.freecodecamp.org
- https://developer.mozilla.org/en-US/docs/Web/HTML

#### PHP:

- https://www.php.net
- https://www.w3schools.com/php/
- https://phptherightway.com/

#### Using ChatGPT:

- Ask: "How do I create a dropdown menu in HTML?"
- Ask: "How do I write a login form in PHP?"
- Copy your working code, ask ChatGPT to explain it line by line.

You don't have to memorize everything. You just need to build and break things until they make sense.