# Cotswold League Website - Development & Setup Recap

This document serves as a complete record of the steps taken to build, host, and maintain the Cotswold League website (thecotswoldleague.co.uk). It details the software stack, configuration settings, and development workflow used to create the site from scratch.

## 1. Infrastructure & Hosting Setup

### Software Stack (The "AMPP" Stack)

* **XAMPP:** Used to turn your local Windows PC into a web server.
  + **Apache:** The web server software that "serves" the files to browsers.
  + **MySQL:** The database management system used to store club details and scores.
  + **PHP:** The scripting language used to make the pages dynamic (e.g., pulling scores from the database).
* **Cloudflare Tunnels:** Used to expose your local XAMPP server to the public internet securely without port forwarding.
* **Visual Studio Code (VS Code):** The code editor used for development.
* **Git & GitHub:** Used for version control and backing up the code.

### Domain & DNS Configuration

1. **Domain:** Registered thecotswoldleague.co.uk via Namecheap.
2. **DNS Management:** Moved nameservers to Cloudflare to utilize their Tunnel service.
3. **Tunnel Configuration:**
   * Created a tunnel named LeagueServer pointing to localhost:80.
   * **Public Hostnames:**
     + thecotswoldleague.co.uk -> http://localhost:80
     + www.thecotswoldleague.co.uk -> http://localhost:80
   * *Troubleshooting Note:* Initially encountered a "CNAME record exists" error. Fixed by deleting the default "parking" records in Cloudflare DNS before creating the tunnel hostname.

## 2. Server Configuration (XAMPP)

### Installation & Security

1. **Installation:** Installed XAMPP to C:\xampp.
2. **Service Setup:** Installed Apache and MySQL as Windows Services so they start automatically on boot.
3. **Security Measures:**
   * **Directory Listing:** Disabled directory browsing (to hide file lists) by creating a .htaccess file with the line Options -Indexes.
   * **Database Password:** Set a root password for MySQL using mysqladmin.

### File Structure

* **Root Directory:** C:\xampp\htdocs\cotswoldleague
* **Images:** Stored in images/ with subfolders for Teams/ and Wyvern/.
* **Key Files:**
  + index.php (Homepage)
  + nav.php (Shared navigation bar)
  + db.php (Database connection settings)
  + database.sql (Backup of the database structure)

## 3. Website Development

### Tech Stack

* **HTML5 / PHP:** Core structure.
* **Tailwind CSS:** Used via CDN for rapid, responsive styling.
* **Lucide Icons:** Used for consistent, clean iconography.
* **JavaScript:** Used for mobile menus and the countdown timer.

### Key Features Implemented

1. **Homepage:** Features a live countdown to Round 1 (Jan 31st, 2026) and sponsor highlights (Wyvern).
2. **Club Directory:** A dynamic page (clubs.php) that pulls 20 club details (logo, pool address, website) from the MySQL database.
3. **Spectators Page:** Contains essential gala info (prices, times), the full 4-round draw, and links to the Spectator Programme.
4. **League Table:** A dynamic table (table.php) that automatically calculates totals from the 4 rounds and displays standings.
5. **Admin Portal:** A password-protected page (admin.php) for Club Reps to access Google Drive links for team sheets and results calculators.
   * **Password:** Cotswold2026Galas
6. **Join Us:** An informational page outlining the league's development ethos and priority policy for new applicants.
7. **History:** An archive page displaying the full 2025 season results and finals standings.

### The "Dynamic" Shift

We transitioned from static .html files to .php files to allow for:

* **Shared Navigation:** Using <?php include 'nav.php'; ?> so editing the menu once updates all pages.
* **Database Integration:** clubs.php and table.php now read directly from the database, meaning you don't have to edit code to update scores.

## 4. Database Setup (MySQL)

We created a database named cotswold\_league with two primary tables:

1. **clubs Table:**
   * Columns: id, name, logo, pool\_name, postcode, website.
   * *Purpose:* Stores the static details for all 20 clubs.
2. **results Table:**
   * Columns: id, club\_id, round\_1, round\_2, round\_3, round\_4, total.
   * *Purpose:* Stores the scores. It is linked to the clubs table via club\_id.

**Update Mechanism:** We built a hidden update\_scores.php page. This allows the Secretary to log in and type scores into a simple form, which instantly updates the League Table on the public site.

## 5. Version Control (GitHub)

We connected the local folder to a private GitHub repository (lewisplume/Cotswoldleague) for backup.

### Workflow

1. **Initialize:** git init
2. **Identity:** Configured user email and name.
3. **Ignore:** Created a .gitignore file to exclude temporary drive upload folders and system files.
4. **Sync:** Changes are committed locally in VS Code and "Pushed" to the main branch on GitHub.
   * *Troubleshooting:* We encountered a "refspec" error initially because the repo was empty. We fixed this by staging files (git add .) and committing before pushing. We also used git push --force to align the remote repo with the local version.

## 6. Troubleshooting & Maintenance Guide

### "The site is down"

1. Check if your PC is on and connected to the internet.
2. Open XAMPP Control Panel: Are Apache and MySQL green? If not, click Start.
3. Open services.msc: Is the "Cloudflare Tunnel" service running?

### "I updated the menu but it didn't change"

* You likely edited nav.php. Ensure you saved the file (Ctrl+S).
* Clear your browser cache or check in Incognito mode.

### "I added a new logo but it's broken"

1. Ensure the file is in images/Teams/.
2. Check the filename extension (e.g., .png vs .jpg vs .webp).
3. Update the clubs table in the database to match the **exact** filename (case-sensitive).

### "I want to update scores"

1. Navigate to localhost/update\_scores.php.
2. Enter the admin password.
3. Input the new scores and click Save.

### "I want to back up my work"

1. Open VS Code.
2. Go to the Source Control tab.
3. Type a message (e.g., "Updated Round 3 scores") and click **Commit**.
4. Click **Sync Changes**.

**Project Credits:**

* **Built By:** Lewis Plume
* **Role:** League Secretary (Academy Swim Team)
* **Launch Date:** January 2026 Season