

Documentation Tool

Introduction

For the Game Hall Booking System, the documentation has been prepared using a combination of tools that support web-based development, code explanation, database structure representation, and project maintenance.

These tools allow the development team to create clear documentation for system architecture, coding structure, database schema, and user operations.

Documentation for this project is created using standard web development tools and manual documentation methods to ensure compatibility with **PHP**-based systems.

1. Platform & Environment Tools

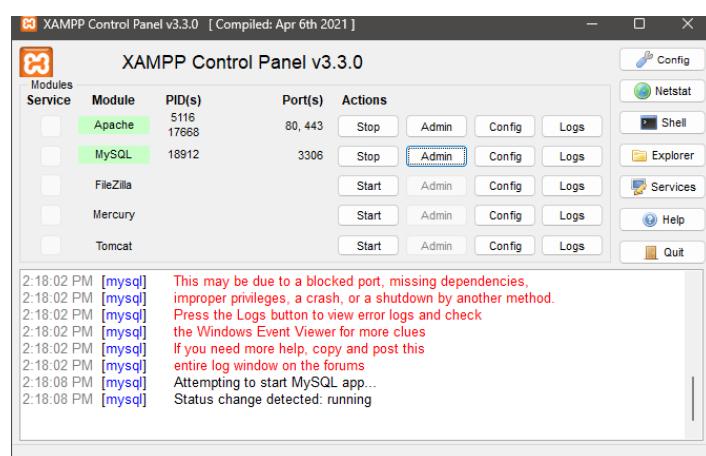
a. XAMPP (Apache +MySQL)

XAMPP is used as the local server environment for developing and testing the Game Hall Booking System.

It allows:

- Hosting PHP files
- Managing MySQL database using phpMyAdmin
- Running the entire system locally

Here is the XAMPP Control Panel we are using (Apache and MySQL)

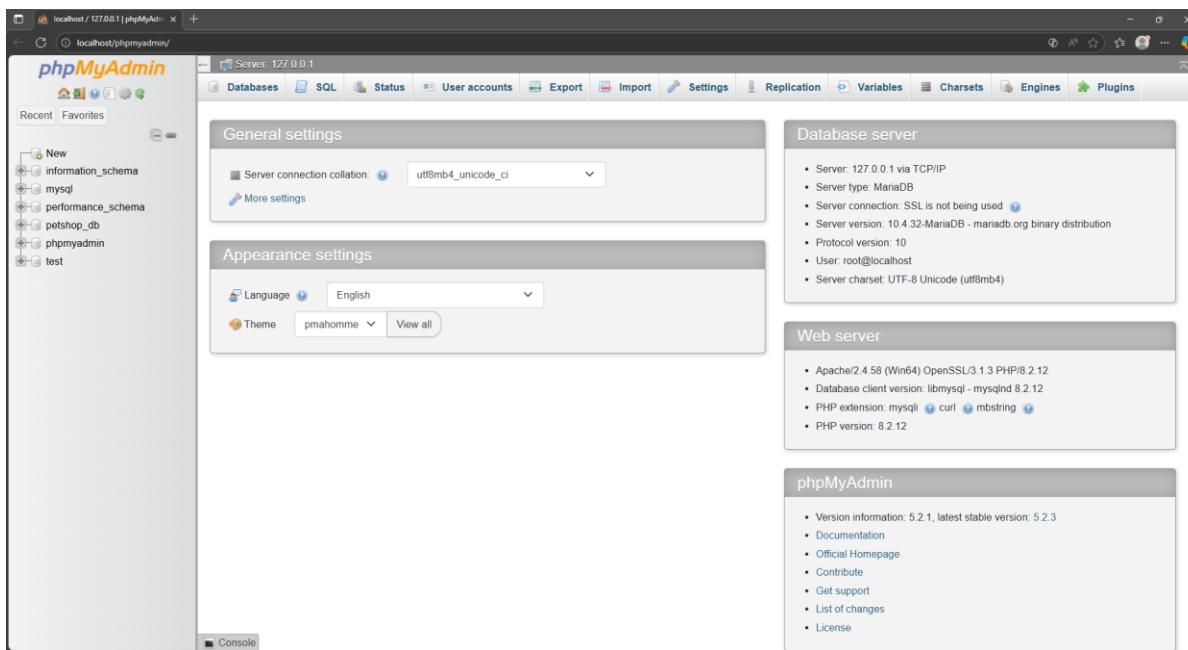


XAMPP ensures a consistent execution environment for development and testing.

b. MySQL (via phpMyAdmin)

phpMyAdmin is used to:

- Document database tables
- Visualize relationships
- Export SQL structure
- Maintain ER diagrams and database



2. Development & Code Documentation Tools

a. Visual Studio Code (VS Code)

VS Code is used as the primary code editor for documenting and maintaining PHP, HTML, CSS, and SQL files.

It supports:

- Syntax highlighting
- Code auto-formatting
- Comment-based documentation
- Extensions for PHP, MySQL, and HTML development

Developers also use VS Code to maintain inline documentation through PHPDoc comment blocks.

b. PHPDoc (Inline Code Documentation)

PHPDoc-style comments are used inside PHP files to explain:

- Function purpose
- Parameters
- Return values
- Class descriptions

Steps to install PHPDumentor:

Step 1 — Confirm PHP location in XAMPP

```
C:\xampp\php\php.exe
```

Step 2 — Add PHP to Windows PATH

- Open Environment Variables
- Edit the PATH variable
- Under System variables, find Path and paste the php location

Step 3 — Test PHP and mbstring extension

```
C:\Users\hp>php -v
PHP 8.2.12 (cli) (built: Oct 24 2023 21:15:15) (ZTS Visual C++ 2019 x64)
Copyright (c) The PHP Group
Zend Engine v4.2.12, Copyright (c) Zend Technologies

C:\Users\hp>php -r "echo extension_loaded('mbstring') ? 'yes' : 'no';"
yes
C:\Users\hp>
```

Step 4 — Install phpDocumentor using PHAR

Click here: <https://phpdoc.org/phpDocumentor.phar>

Step 5 — Generate documentation

```
cd C:\xampp\htdocs\myproject
php phpDocumentor.phar run -d src -t docs
```

After running phpdock, it will generate documentation inside: docs/index.html

full API documentation website:

The screenshot shows a web browser window with the URL `file:///D/xampp/htdocs/turfmate/docs/index.html` in the address bar. The page title is "Documentation". On the left, there's a sidebar with navigation links: "Packages" (Application, TurfmateBookingSystem, Turfmate), "Reports" (Deprecated, Errors, Markers), and "Indices" (Files). The main content area has a "Documentation" header and a "Table of Contents" section. Below that is a "Functions" section with the following entries:

- `M registerCustomer()`: array<string|int, mixed>
Registers a new customer.
- `M loginCustomer()`: array<string|int, mixed>
Logs in a customer.
- `M getGameHalls()`: array<string|int, mixed>
Returns available game halls.
- `M isSlotAvailable()`: bool
Checks if a given slot on a given date is available for booking.
- `M createBooking()`: array<string|int, mixed>
Creates a new booking.
- `M processPayment()`: array<string|int, mixed>
Processes payment for a booking.

A search bar at the top right says "Search (Press "/" to focus)". There are also social media sharing links for AliExpress, Booking.com, Facebook, and YouTube.