Custom PHP MVC Framework Documentation

**1. System Requirements**

Before installing the custom PHP MVC framework, ensure that your system meets the following requirements:

* **PHP** version 7.4 or higher.
* **Composer** installed for dependency management.
* **XAMPP/WAMP** or any local web server setup with Apache.
* **MySQL** (optional, if using database features).

### 2. Installation Instructions

#### **a. Download & Setup**

1. **Download the repository**:
   * Download the MVC framework from the provided source or clone it from your version control system (e.g., GitHub).

Example:

git clone https://github.com/username/custom-mvc.git

1. **Install dependencies** using Composer:

composer install

This will install the necessary PHP packages, such as **PHPMailer**, into the vendor/ directory.

#### **b. Directory Setup**

1. Make sure your project is stored in the **htdocs** directory of XAMPP (or equivalent for WAMP). Example:

C:\xampp\htdocs\mvc-app

1. Set the correct permissions for the storage folder to allow logging:

chmod -R 775 storage/

### 3. Configuration

#### a. Environment Configuration

To configure the environment settings, edit the config/env.php file. This file defines several environment variables required by the application.

**Sample env.php file**:

define('ENV', [

'DEVELOPMENT' => true, // Change to false in production

'BASE\_PATH' => '/mvc-app/',

'CONTACT\_EMAIL' => 'your-email@example.com',

'OPENWEATHER\_API\_KEY' => 'your-api-key-here',

'MAIL\_MAILER' => 'smtp',

'SMTP\_HOST' => 'smtp.mailtrap.io',

'SMTP\_USERNAME' => 'your-username',

'SMTP\_PASSWORD' => 'your-password',

'SMTP\_PORT' => 2525,

'MAIL\_ENCRYPTION' => PHPMailer::ENCRYPTION\_STARTTLS,

]);

* **DEVELOPMENT**: Set this to true to show detailed error messages during development.
* **BASE\_PATH**: The base URL of the application.
* **CONTACT\_EMAIL**: Email address where contact form submissions will be sent.
* **OPENWEATHER\_API\_KEY**: API key for accessing OpenWeather data (if needed).
* **MAIL Configuration**: SMTP settings for sending emails via PHPMailer.

#### **b. Email Configuration**

To send emails, ensure you have the correct SMTP settings in the environment file. If you are using **Mailtrap** or any SMTP service, configure the following:

php

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'SMTP\_HOST' => 'smtp.mailtrap.io',

'SMTP\_USERNAME' => 'your-username',

'SMTP\_PASSWORD' => 'your-password',

'SMTP\_PORT' => 2525,

'MAIL\_ENCRYPTION' => PHPMailer::ENCRYPTION\_STARTTLS,

#### **Folder Structure**

* Below is an overview of the directory structure of the project:

mvc-app/

├── app/

│ ├── Controllers/

│ ├── Exceptions/

│ ├── Models/

│ └── Helpers/ Helpers.php

├── config/

│ └── env.php

├── core/

│ ├── Controller.php

│ ├── Model.php

│ └── DD.php

├── public/

│ ├── css/

│ ├── images/

│ ├── js/

├── resources/

│ ├── view/

├── routes/

│ └── web.php

├── storage/

│ └── logs/

├── vendor/

├── index.php

├──. htaccess

├──bootstrap.php

└── composer.json