Autoload Multiple Files From Different Directories in PHP

Oyekunle Opeyemi · Follow
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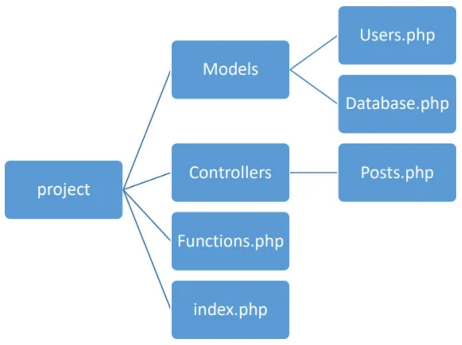
Let's take a look at the file structure below:



File Structure

This is not a real project, but a sample good enough to explain how to autoload multiple files from different directories. First off, let's start with autoloading files from one directory.

1. **Autoload files from a single directory:** Let's make an assumption that files would be loaded from only the Models directory, we can simply use the PHP built-in autoload function:

spl_autoload_register(?callable $callback = null, bool $throw = true, bool $prepend = false): bool

i. The first parameter is a callback (optional). The default value is null. The default implementation of spl_autoload will be registered if no parameter is provided.

ii. The second parameter is a boolean (optional). The default is true. If the autoload_function cannot be registered, spl_autoload_register() should throw exceptions.

iii. The third parameter is also a boolean (optional). If true, spl_autoload_register() will prepend the autoloader on the autoload stack instead of appending it.

For more explanation about this function, you can follow this link

https://www.php.net/manual/en/function.spl-autoload-register.php

Let's create Database.php and Users.php files in the Model directory, and an index.php file in the root directory:

Database.php

```php
<?php

class Database{
    public function connect() : string {
        return "I am connected to the database.";
    }
}
```

Users.php

```php
<?php

```

```
class Users{
    public function get_user() : array {
        return [
            'id'=> 1,
            'name'=> 'Oyekunle Opeyemi'
        ];
    }
}
```

index.php

```
<?php

spl_autoload_register(function ($class){
   $class_name = substr($class, strrpos ($class, "\\"));
   require_once 'Models/'.ucfirst($class_name).".php";
  }
 );

$Database = new Database();
$Users = new Users();
```

In the index.php file, we have been able to include all the php files in the Model directory by using the spl_autoload_register() function. So, let's look at how we can autoload multiple files from multiple directories.

2. **Autoload files from multiple directories:** This is more of an upgrade to our last example. Let start by creating two more files: Posts.php in the Controllers directory and Functions.php in the root directory:

Posts.php

```
<?php

class Posts{
    public function get_post() : array {
        return [
            'id'=> 1,
            'title'=> 'Autoload Multiples Files From Different Directories in PH
        ];
    }
}
```

Functions.php

```
<?php

class Functions{
    public static function auto_load_files(string $class, array $dirs) : void {
        $class_name = substr($class, strrpos ($class, "\\"));
        foreach ($dirs as $dir) {
            $classes = "$dir/".ucfirst($class_name).".php";
            if (file_exists($classes)) require_once $classes;
        }

    }
}
```

Let's take a look at what we have in the Functions.php file:

a. A static function was created with two parameters that accepts a string and an array respectfully.

b. The $dirs array was looped through to pick each directory in the array to form a path to the class file names.

c. In order not to assign a file to a directory that does not exist, a file_exists() function was used to check the file's existence in the directory before creating a path for it.

We would have to update the index.php file.

index.php

```
<?php
require 'Functions.php';

spl_autoload_register(function ($class){
    $data = [
        "Models",
        "Controllers"
    ];
      Functions::auto_load_files($class, $data);
    }
);

$Database = new Database();
$Users = new Users();
```

```
$Posts= new Posts();
```

a. In the callback, $data is an array of directories, where the class files we want to access are.

b. We called the static function auto_load_files($class, $data) and provided the class registered, and the array of directories.

c. The Posts class from Controllers was added.

I hope this helps someone out there.

Thanks for reading.

PHP Autoload Autoloading

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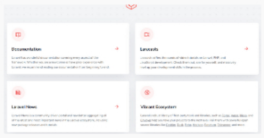

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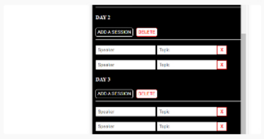

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{
    "autoload": {
        "psr-4": {
            "YourVendor\\HelloWorld\\": "src/"
        }
    },
    "prefer-stable": true,
    "minimum-stability": "dev"
}
```

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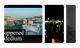
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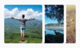
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```
use omarchouman\LaraUtilX\Utilities\FilteringUtil;

public function filterItems(Request $request)
{
    // Sample data collection (replace this with your actual data)
    $data = collect([
        ['id' => 1, 'name' => 'John', 'age' => 25],
        ['id' => 2, 'name' => 'Jane', 'age' => 30],
        // Add more items as needed
    ]);

    // Get filter parameters from the request
    $name = $request->input('name');
    $operator = $request->input('operator');
    $value = $request->input('value');

    // Use LaraUtilX FilteringUtil to filter the data
    $filteredData = FilteringUtil::filter($data, $name, $operator, $value);

    // Return the filtered data
    return response()->json(['data' => $filteredData->values()]);
```

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```
public static function stockStatusBadge($status)
    {
        $class = [
            Enum::STOCK_AVAILABLE => 'btn2-secondary',
            Enum::STOCK_ASSIGNED  => 'btn-primary',
            Enum::STOCK_WARRANTY  => 'btn-secondary',
            Enum::STOCK_DAMAGED   => 'btn-warning',
            Enum::STOCK_MISSING   => 'btn-dark',
            Enum::STOCK_EXPIRED   => 'btn-danger',
            Enum::STOCK_RETURN    => 'btn2-secondary',
            Enum::STOCK_OUT       => 'btn2-secondary',
        ];

        return '<span class="badge ' . $class[$status] . '">' .
Enum::getStockStatus($status) . '</span>';
    }
```

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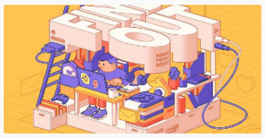

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