1. parse_url Function

The parse_url() function is used to parse a URL and retrieve its components.
In this lesson, we specifically use it to extract the **path** from the current request URL:

$uri = parse_url($_SERVER["REQUEST_URI"])["path"];

For example, if the full URL is:
http://localhost/laracast-php/about?name=ali
Then $uri will be:
/laracast-php/about

This path is then used to determine which controller to load.

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2. Defining the $routes Array

We define an associative array called $routes where keys are URL paths, and values are the controller files to be loaded:

```
$routes = [
    "/" => "controllers/index.php",
    "/about" => "controllers/about.php",
    "/contact" => "controllers/contact.php"
];
```

---

3. The abort() Function

This function is used to handle unmatched routes by sending a 404 HTTP status code and loading a 404 error page:

```
function abort($code = 404)
{
    http_response_code($code);
    require "views/{$code}.php";
    die();
```

```
}
```

If the requested path is not in the $routes array, we call abort() to show the "Page Not Found" view.

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4. Routing Logic

```
if (array_key_exists($uri, $routes)) {
    require $routes[$uri];
} else {
    abort();
}
```

- First, check if the requested URI exists in the $routes array.
- If yes, include the corresponding controller file.
- Otherwise, call the abort function.

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5. Full Example Code

```
$uri = parse_url($_SERVER["REQUEST_URI"])["path"];

$routes = [
    "/" => "controllers/index.php",
    "/about" => "controllers/about.php",
    "/contact" => "controllers/contact.php"
];

function abort($code = 404)
{
    http_response_code($code);
    require "views/{$code}.php";
    die();
}

if (array_key_exists($uri, $routes)) {
```

```
  require $routes[$uri];
} else {
  abort();
}
```

Summary

- Use parse_url($_SERVER["REQUEST_URI"])["path"] to get the current path.
- Map paths to controller files with an associative array $routes.
- Use a custom abort() function for 404 errors.
- Check the requested URI against $routes to determine which controller to load.