PHP - Flash Messages

Message flashing in a PHP web application refers to the technique that makes certain messages popup on the browser window for the user to receive application's feedback. To be able to give the user a meaningful feedback to his interactions is an important design principle, that gives a better user experience.

In a PHP web application, we can use the session data to flash messages regarding success or failure of a certain action, notifications or warnings, etc., from time to time to keep the user informed.

A **flash message** allows you to create a message on one page and display it once on another page. To transfer a message from one page to another, you use the **\$_SESSION** superglobal variable.

To start with, you add a variable to the \$_SESSION array as follows -

```
<?php
    session_start();
    $_SESSION['flash_message'] = "Hello World";
?>
```

Later, navigate to another page, and retrieve the flashed message from the \$_SESSION variable and assign it to a variable. Then, you can display the message and then delete the message from the \$_SESSION -

```
<?php

session_start();

if(isset($_SESSION['flash_message'])) {

    $message = $_SESSION['flash_message'];

    unset($_SESSION['flash_message']);

    echo $message;
}

?>
```

To generalize the basic idea of handling the flashed messages, we shall write a function that adds a message to the $\$_SESSION -$

```
session_start();
function create_flash_message(string $name, string $message): void {
    // remove existing message with the name
```

```
if (isset($_SESSION[FLASH][$name])) {
    unset($_SESSION[FLASH][$name]);
}
// add the message to the session
$_SESSION[FLASH][$name] = ['message' => $message];
}
```

Let us also have another function that reads back a message, flashes it on the browser, and removes it from the \$_SESSION.

```
function display_flash_message(string $name): void {
   if (!isset($_SESSION[FLASH][$name])) {
      return;
   }

   // get message from the session
   $flash_message = $_SESSION[FLASH][$name];

   // delete the flash message
   unset($_SESSION[FLASH][$name]);

   // display the flash message
   echo format_flash_message($flash_message);
}
```

The **format_flash_message()** function applies desired formatting to the obtained string with appropriate CSS rules.

If there are more than messages that have been flashed by the application, all of them can be retrieved and flashed with the following example —

```
function display_all_flash_messages(): void {
   if (!isset($_SESSION[FLASH])) {
      return;
   }

   // get flash messages
   $flash_messages = $_SESSION[FLASH];

   // remove all the flash messages
   unset($_SESSION[FLASH]);

   // show all flash messages
```

```
foreach ($flash_messages as $flash_message) {
    echo format_flash_message($flash_message);
}
```

Use the following flash() function to create, format and flash the messages

To implement the above method, call the **flash() function** on the first page.

```
flash('first', 'Hello World');
```

Navigate to another page and call the flash() function to retrieve and display the message

```
flash('first');
```

Mechanism of using the flash messages is usually employed on a signup page to redirect users to the login page with a welcome message after they sign up.