Group 4

Error handling in PHP is the process of detecting, reporting, and handling errors that occur during the execution of a PHP script. There are three types of errors in PHP: notices, warnings, and errors. Notices are minor issues that don't stop the execution of the script, warnings are more serious and may cause unexpected results, and errors are severe issues that cause the script to stop executing.

PHP provides a set of built-in functions for handling errors. The most common of these functions are:

error_reporting(): This function sets the level of error reporting for the current script. It takes an integer as its argument, which represents the level of error reporting. For example, setting **error_reporting(E_ALL)** will display all errors, warnings, and notices.

set_error_handler(): This function sets a user-defined error handler function. The error handler function is called whenever an error occurs in the script. The error handler function takes four parameters: the error level, the error message, the file where the error occurred, and the line number where the error occurred.

trigger_error(): This function generates a user-level error message. It takes two parameters: the error message and the error level.

```
<?php
// Define a custom error handler function
```

```
function customErrorHandler($errno, $errstr, $errfile, $errline) {
    switch ($errno) {
        case E_USER_ERROR:
            echo "<b>ERROR:</b> [$errno] $errstr<br />";
            echo "Fatal error on line $errline in file $errfile";
            exit(1);
            break;

        case E_USER_WARNING:
            echo "<b>WARNING:</b> [$errno] $errstr<br />";
            break;

        case E_USER_NOTICE:
            echo "<b>NOTICE:</b> [$errno] $errstr<br />";
            break;

        default:
            echo "Unknown error type: [$errno] $errstr<br />";
            break;
    }
}

// Set the error reporting level and error handler function
error_reporting(E_ALL);
```

```
set_error_handler("customErrorHandler");


// Trigger some errors
$var = 1 / 0; // generates a division by zero error
trigger_error("This is a user warning", E_USER_WARNING); // generates a user warning
trigger_error("This is a user notice", E_USER_NOTICE); // generates a user notice
trigger_error("This is an unknown error", 999); // generates an unknown error
?>
```

$error_level: It is required parameter and it must be an integer. There are predefined error levels.

$error_message: It is required parameter and it is the message which user want to print.

$error_file: It is optional parameter and used to specify the file in which error has been occurred.

$error_line: It is optional parameter and used to specify the line number in which error has been occurred.

$error_context: It is optional parameter and used to specify an array containing every variable and their value when error has been occurred.

error_level: These are the possible error level which are listed below:

1 : .E_ERROR :fatal runtime error execution of script has been halted

2 : E_WARNING :non fatal runtime error execution of script has been halted

4 : E_PARSE :compile time error it is generated by the parser

8 :E_NOTICE :The script found something that might be an error

16 :E_CORE_ERROR :Fatal errors that occurred during initial startup of script

32 :E_CORE_WARNING :Non fatal errors that occurred during initial startup of script

8191 :E_ALL :All errors and warning