PHP File Handling

CSC 242, Web Programming

PHP File Manipulation

- PHP has functions for manipulating files:
 - Creating files
 - Reading files
 - Uploading files
 - Editing files

The fopen Function

- Description: open a file
- Basic Syntax:

```
fopen(string $filename, string $mode)
```

- Parameters:
 - filename: The URL or file to open
 - mode: The access type
- Return value: a file pointer resource

fopen Mode Values

- "r": read only; starts at the beginning of the file
- "r+": read and write; starts at the beginning of the file
- "w": write only; clears file contents or creates a new file
- "w+": read and write; clears file contents or creates a new file
- "a": write only; writes to end of file or creates a new file
- "a+": read and write; writes to end of file or creates a new file
- "x": write only; creates a new file or returns an error if the file exists
- "x+": read and write; creates a new file or returns an error if the file exists

The fread Function

- Description: read a file
- Basic Syntax:

```
fread(resource $handle, int $length)
```

- Parameters:
 - handle: a file pointer resource
 - length: number of bytes to read
- Return value: a read string or FALSE on failure

The fclose Function

- Description: close a file
- Basic Syntax:

```
fclose(resource $handle)
```

- Parameters:
 - handle: a file pointer resource
- Return value: TRUE on success or FALSE on failure

The filesize Function

- Description: get the size of a file
- Basic Syntax:

```
filesize(string $filename)
```

- Parameters:
 - filename: path to the file
- Return value: size of the file in bytes

The fgets Function

- Description: read a single line from a file
- Basic Syntax:

```
fgets(resource $handle)
```

- Parameters:
 - handle: a file pointer resource
- Return value: a string

The feof Function

- Description: check for end of file
- Basic Syntax:

feof(resource \$handle)

- Parameters:
 - handle: a file pointer resource
- Return value: TRUE if the file pointer is at EOF, otherwise FALSE

The file Function

- Description: reads an entire file into an array
- Basic Syntax:

```
file(string $filename, [int $flags = 0])
```

- Parameters:
 - filename: path to the file
 - (optional): flags
 - FILE_USE_INCLUDE_PATH search for the file in the include path
 - FILE_IGNORE_NEW_LINES omit newline at the end of each array element
 - FILE_SKIP_EMPTY_LINES skip empty lines
- Return value: the file in an array where each element corresponds to a line

The fwrite Function

- Description: write to a file
- Basic Syntax:

```
fwrite(resource $handle, string $string)
```

- Parameters:
 - handle: a file pointer resource
 - string: the string to be written
- Return value: the number of bytes written

Basic Example

```
$f = fopen("myfile.txt", "r");
while (!feof($f)) {
    $line = fgets($myfile);
    print($line);
}
$fclose($f);
```

Example Using file

```
$lines = file("myfile.txt");
foreach ($lines as $line) {
   print($line);
}

// use optional flags
$trimmed_lines = file("myfile.txt",
   FILE_IGNORE_NEW_LINES | FILE_SKIP_EMPTY_LINES);
```