

# asgn00 - A: Review and Git

## Objectives

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Review the following topics to kickstart the term.

- Set up your localhost
- General problem solving
- Functions
- Arrays
- Git

## Assignment

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### Setup

We will continue to use XAMPP or MAMP this term as our stand-alone server. In your XAMPP/MAMP **htdocs** folder, create a new folder called **web250**

[Win]

```
cd c:\xampp\htdocs\web250
```

[Mac]

```
cd /Applications/MAMP/htdocs/web250/
```

### index.php

Inside the **web250** folder, create a file named **index.php**. We could use index.html, but using PHP file gives us flexibility should we want to add PHP code to it later.

This file is our main page for the class. It is a list of links to the exercises.

# PHP Code challenges

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- Watch the introduction and the first three challenges from PHP Code Challenges from LinkedIn Learning (LiL).
- Complete the code challenges yourself.
- Try not to look at the answer. Use resources like the PHP manual if you get stuck -- it is okay if you peek :).
- Name the files
  - **event.php**
  - **flip.php**
  - **fizz-buzz.php**

## His coding style

1. He uses "Yoda" style in his `if` statements. This style is in reverse from what we have learned. He does it so he cannot accidentally assign the value to the expression. I don't like it. Here is an example.

```
if( 0 == $x % 2 ) {  
}
```

Instead of

```
if( $x % 2 == 0 ) {  
}
```

## The modulo operator

We haven't really used the modulo operator yet. It returns the remainder when using integer division.

One of its uses is finding if a number is odd or even. Here is an example

```
```php
// since 4 / 2 gives a remainder of 0, the number is even
$x = 4;
if( $x % 2 == 0 ) {
    echo "$x is even"
}
```

## Ternary operator

The ternary operator is shorthand for an `if...else` statement. It is used a lot in more complex coding because it shortens your code. There is an argument that it makes the code harder to read. That is only true when you first start using it.

Although he explains it in his answer, here is a [link to the ternary operator](#) for more information. You will need to scroll down to find it.

## Git

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Students often wonder why I spend so much time on version control with git. Here is a quote from a recent graduate who landed a job in web development with NOAA after completing his Software and Web Development Degree.

If you'd ever like someone to speak to what graduates are up to or know what parts of the program I use the most are, let me know! (it's Git)

## Two Git Repositories for the term

Instead of creating a repo for each assignment, this term, you will create

1. A web250 repo that contains each of your assignments instead of a repo for each assignment.
2. A second repo for the project, which we will start about midway through the term.

For each of the exercises, use git for version control. Here is an example for the first exercise file, **event.php**.

- Download and install git if necessary.
- Open your terminal
- Navigate to your root folder for this assignment

[Win]

```
cd c:/xampp/htdocs/web250c:/xampp/htdocs/web250
```

[Mac]

```
cd /Applications/MAMP/htdocs/web250
```

Initialize git

```
git init
```

Stage the files

The dot (.) is a wildcard and means all files

```
git add .
```

Commit the files The "m" stands for "message"

```
git commit -m "Initial commit"
```

After completing the first exercise, event.php, stage and commit the files again.

```
git add .  
git commit -m "Completed event.php"
```

Move on to the next exercise using the file **flip.php**.

After finishing your code, run the following lines to stage and commit your work.

```
git add .  
git commit -m "Completed flip.php"
```

After finishing the last exercise, **fizz-buzz.php**, run the following lines to stage and commit the file.

```
git add .  
git commit -m "Completed fizz-buzz.php"
```

## Push to GitHub

Create an account on GitHub if you don't have one. Create a new GitHub repo called web250. Here are the steps. Note: You may have to create SSH access. We will discuss this in class.

- Log on to GitHub
- Click on the New button
- Enter **web250** for the repository name
- Enter `This repo is for the school assignments at A-B Tech CC.`
- Click **Create Repository**
- Scroll to the section labeled, '...or push an existing repository from the command line.'
- Copy and paste the three lines displayed. Here is my example. Yours will be different.

```
git remote add origin https://github.com/charliekwallin/web250-temp.git  
git branch -M main  
git push -u origin main
```

- Return to your GitHub account.
- Click on the link to your web250 repo at the top of the page to see the results.

## Submit your work

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Copy and paste your **web250** GitHub address into Moodle's Comments section for this assignment. I will grade the assignment by cloning your work instead of using Moodle to read your files.