

# asgn03 Static methods and properties

## Objectives

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- Modify existing code to
  - Add static properties
  - Add static methods
- Use the ternary operator instead of the traditional `if...else`
- Use Git and GitHub without explicit instructions.

## Videos

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Watch chapter 5 - [Static Properties and Methods](#) from the PHP: Object-oriented programming series.

- Create a folder called `asgn03-static-challenge` in your `web250` folder.
- Complete the static references challenge. The challenge will prepare you for the next part of the assignment.
- It is fine to use the solution to help you better understand the problem.

## Setup

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- Download and unzip the file `asgn03-static` from Moodle and place it into your `web250` folder.
- Use this code as your starter code.
- I have separated the class, `Bird.php`, from `index.php`. This file differs from the screencast, but I think it makes the code easier to read. You will need to modify both of these files.

## Git

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If you need help,

1. Review the instructions in the previous assignment, or
2. Look up instructions online.

## Steps you will need using git

- Stage new files (add)
- Commit as needed
- Create a branch called `asgn03-static`
- Switch to the `asgn03-static` branch.
- Stage and commit when finished.
- Switch to the `main` branch.
- Merge completed code from the `asgn03-static` branch to the `main` branch
- Stage and commit the `main` branch.
- Push the contents of all your branches to your GitHub repo. You can use `git push --all`

## Code

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Modify the code to meet the following requirements.

### Bird Class

Create the following.

- A static property named `instance_count` .
- A static property named `egg_num` and set its default to zero
- a static method named `create()` that creates a new instance of a Bird object.

### Ternary operator

Modify the following method (also located in the Bird.php file), so it uses the PHP ternary operator.

```
function can_fly() {
if ( static::$flying == "yes" ) {
    $flying_string = "bird can fly";
} else {
    $flying_string = " cannot fly and it stuck on the ground";
}
return $flying_string;
}
```

## Flycatcher subclass

Add a static property named `egg_num` that overrides the Bird class `egg_num` by adding the string "3-4, sometimes 5."

## Git

Stage and commit.

## Index.php

- Display the `instance_count` for the Bird, Yellow-bellied Flycatcher, and Kiwi before using the `create()` method.
- Create new instances of Bird, Yellow-bellied Flycatcher, and Kiwi
- Display the `instance_count` for the Bird, Yellow-bellied Flycatcher, and Kiwi after using the `create()` method.

## Git and GitHub

You should have completed all of your code at this point.

While you are on the `asgn03-static` branch

- Stage and commit your files
- Switch to the main branch
- Merge main with the `asgn03-static` branch
- Stage and commit
- Push all of your code, including the branches to GitHub.

**Note:** You may get a warning that your local version of Git is out of sync with your Origin (online version). This happens when your local git files are out of sync with your online repo. Follow the

messages that Git provides to fix the problem.

## Submit Your Work

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Copy and past your GitHub address in Moodle.

## Next Week

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We will start using online webhosting with a domain name next week. You may continue to use the one you created for WEB182.

## Resources

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[Audubon](#)