### Submission Worksheet

#### **CLICK TO GRADE**

https://learn.ethereallab.app/assignment/IT202-007-F2024/it202-module-2-php-problems/grade/jd755

Course: IT202-007-F2024

Assigment: [IT202] Module 2 PHP Problems

Student: Jeremy R. (jd755)

### Submissions:

Submission Selection

1 Submission [submitted] 9/19/2024 8:55:06 PM

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### Instructions

^ COLLAPSE ^

Overview video: <a href="https://youtu.be/Vvx\_cfdLqqM">https://youtu.be/Vvx\_cfdLqqM</a>

#### Guide:

- 1. Make sure you're in the dev branch locally and git pull origin dev any pending changes.
- 2. Make a new branch per the recommended branch name below (git checkout -b ...).
- 3. Grab the template code from

https://gist.github.com/MattToegel/48b48377eaa1937c886b7840c449750a.

- Create individual PHP files for each problem and save the files inside your public\_html folder in a subfolder of your choice.
  - If you don't have this folder yet, refer to the setup lessons (you'll need a few files for the deployment to work).
- 5. Move the unedited template files to GitHub.
  - 1. git add .
  - 2. git commit -m "adding template files"
  - git push origin branch name (see below)
  - Create and open a pull request from the homework branch to main (leave it open until later steps).
- Note: As you work, it's recommended to add/commit at least after each solution is done (i.e., 3+ times in this case).
  - Make sure the files are saved before doing this.
- Fill in the items in the worksheet below (save as often as necessary).
- 8. Once finished, export the worksheet.
- 9. Add the output file to any location of your choice in your repository folder (i.e., a Module2 folder).
- 10. Check that git sees it via git status.

- If everything is good, continue to submit.
  - Track the file(s) via git add.
  - Commit the changes via git commit (don't forget the commit message).
  - Push the changes to GitHub via git push (don't forget to refer to the proper branch).
  - Create a pull request from the homework related branch to dev (i.e., dev <- "homework branch").
  - Open and complete the merge of the pull request (it should turn purple).
  - Locally checkout dev and pull the latest changes (to prepare for future work).
- 12. Take the same output file and upload it to Canvas.

### Branch name: M2-PHP-Problems

Group

100%

Group: Problem 1

Tasks: 1 Points: 3

^ COLLAPSE ^

Task

Group: Problem 1

Task #1: Problem 1 Evidence

Weight: ~100% Points: ~3.00

^ COLLAPSE ^

100%

Details:

Only make edits where the template code mentions.

Solution should ensure that any passed in array will have only the odd values output. Requires at least 2 screenshots (code + output from heroku dev)

Columns: 1

Sub-Task 100%

Group: Problem 1

Task #1: Problem 1 Evidence

Sub Task #1: Show the output from heroku dev (url must be visible)

### Task Screenshots

Gallery Style: 2 Columns

4 2 1

+ + CE SI La 1000 pt MI class all Market Market Representational appropriate Advantage of the Advantage of the Advantage Advantage



The output in Heroku with visible URL

### Caption(s) (required) 🗸

Caption Hint: Describe/highlight what's being shown

### □ Task URLs

**URL #1** 

https://it202-jd755-

UHL

https://it202-jd755-prod-028c8689138c.herokua

prod-028c8689138c.herokuapp.@omd/ule2/problem1.php

Sub-Task 100%

Group: Problem 1

Task #1: Problem 1 Evidence

Sub Task #2: Show the code solution (ucid/date as comment must be present)

4

### Task Screenshots

Gallery Style: 2 Columns

2

```
//jd755 9-18-24, Code that prints out odd numbers
foreach($arr as $x)
{
    if($x % 2 != 0)
    {
        echo "$x ";
    }
} <- #15-20 foreach($arr as $x)
//end edits</pre>
```

Problem 1 code

### Caption(s) (required) <

Caption Hint: Describe/highlight what's being shown

## ⇒ Task Response Prompt

Explain in concise steps how this logically works

Response:

I use a for each loop that takes every integer in the array. Each integer goes through a modulo operation: x%2 != 0, where x is the array integer. %2 is an easy way to determine if a number is even: if it equals zero (aka if dividing by 2 doesn't result in a remainder), the number is even. So, if it's not equal to 0, it is odd.

#### End of Task 1

End of Group: Problem 1

Task Status: 1/1

Group



Group: Problem 2

Tasks: 1 Points: 3

^ COLLAPSE ^

Task



Group: Problem 2

Task #1: Problem 2 Evidence

Weight: ~100% Points: ~3.00

^ COLLAPSE ^

Details:

Only make edits where the template code mentions.

Solution should ensure that any passed in array will have the numerical values summed and rounded to two decimals (similar to currency)

### Columns: 1

Sub-Task 100%

Group: Problem 2

Task #1: Problem 2 Evidence

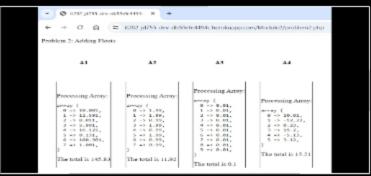
Sub Task #1: Show the output from heroku dev (url must be visible)

## Task Screenshots

Gallery Style: 2 Columns

2

1



Problem 2 inside Heroku dev

Caption(s) (required) ~

Caption Hint: Describe/highlight what's being shown

## ⇔Task URLs

**URL #1** 

https://it202-jd755-

https://it202-jd755-prod-028c8689138c.herokua

prod-028c8689138c.herokuapp.@dom@ule2/problem2.php



Group: Problem 2

Task #1: Problem 2 Evidence

Sub Task #2: Show the code solution (ucid/date as comment must be present)

## **Task Screenshots**

Gallery Style: 2 Columns

4 2 //jd755 9-19-24 foreach(\$arr as \$x) \$total += \$x; //TODO do rounding stuff \$total = \$total\*100; \$total = round(\$total); \$total = \$total/100;

Problem 2 code

Caption(s) (required) 🗸

Caption Hint: Describe/highlight what's being shown

## ■ Task Response Prompt

//end edits

Explain in concise steps how this logically works

Response:

I first add up all of the floating point numbers. As we discussed in class, this can lead to floating-point arithmetic errors. To mitigate this, I multiplied the result by 100. I chose 100 as eventually, we need 2 decimal places. After multiplying, I used the round() function that either rounds the number up or down depending on the decimals. After rounding, I divide by 100. This results in a float with 2 decimal places and it mitigates the arithmetic errors that may have occurred during the addition at the beginning.

### End of Task 1

End of Group: Problem 2

Task Status: 1/1

Group

Group: Problem 3

Tasks: 1 Points: 3

^ COLLAPSE ^

Task

100%

Group: Problem 3

Task #1: Problem 3 Evidence

Weight: ~100%

Points: ~3.00

^ COLLAPSE ^

Details:

Only make edits where the template code mentions.

Solution should ensure that any passed in array will have its values converted to a positive version of the value AND converted back to the original data type.

#### Columns: 1

Sub-Task 100%

Group: Problem 3

Task #1: Problem 3 Evidence

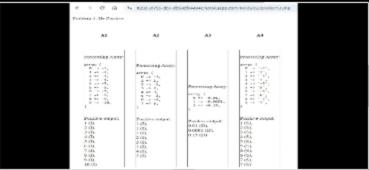
Sub Task #1: Show the output from heroku dev (url must be visible)

4

### Task Screenshots

Gallery Style: 2 Columns

\_\_\_\_2 1



Output from Heroku dev with URL visible

Caption(s) (required) ~

Caption Hint: Describe/highlight what's being shown

### □ Task URLs

**URL #1** 

https://it202-jd755-

https://it202-jd755-prod-028c8689138c.herokua

prod-028c8689138c.herokuapp. & ord/ule2/problem3.php

Sub-Task

Group: Problem 3

Task #1: Problem 3 Evidence

Sub Task #2: Show the code solution (ucid/date as comment must be present)

## Task Screenshots

Gallery Style: 2 Columns

Problem 3 code

### Caption(s) (required) ~

Caption Hint: Describe/highlight what's being shown

## ■ Task Response Prompt

Explain in concise steps how this logically works Response:

First, I created a temporary variable called 'temp' that holds the value of the array at position 'i'. As PHP is a loosely typed language, 'temp' can be any data type. Next, I check if 'temp' is less than 0 (aka negative). This step also works for strings as well-meaning for example "-3" < 0 would be true. Then I check if 'temp' is a string using the is\_string() function. If it is, I multiply 'temp' by -1 then concatenate it to an empty string. This step is necessary as doing arithmetic with a string returns a number. However, if 'temp' is not a string, I don't concatenate. After, I place the new 'temp' variable into the output string at position if which is the same position it came from in the original array.

### End of Task 1

End of Group: Problem 3

Task Status: 1/1

Group



Group: Reflection

Tasks: 3 Points: 1

^ COLLAPSE ^

Task



Group: Reflection

Task #1: Reflect on your experience

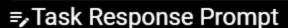
Weight: ~33% Points: ~0.33

^ COLLAPSE ^



Talk about any issues you had, how you resolved them, and anything you learned during this process.

Provide concrete details/examples. At least a few sentences.



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Response.

I found problem 2 to be the hardest as I wanted to make sure I mitigated the arithmetic errors we discussed in class. I experimented a lot to determine what would be a good solution and I did some research into the subject as well. I created my own test cases and used var\_export() to see the real values of float additions. This allowed me to see what strategy worked and what didn't. Ultimately, I did come up with a solution but I am sure there are more ways to do it. I learned how computers really do arithmetic under the hood and how to work around it.

#### End of Task 1

Task



Group: Reflection

Task #2: Include the pull request link for this branch

Weight: ~33% Points: ~0.33

^ COLLAPSE ^



The correct link will end with /pull/ and a number.

# ...**>**

### □Task URLs

URL #1

https://github.com/legitdaylight/jd755-IT202-007/pull/7

UR

https://github.com/legitdaylight/jd755-IT202-007

#### End of Task 2

Task



**Group: Reflection** 

Task #3: Add Screenshot of Wakatime

Weight: ~33% Points: ~0.33

^ COLLAPSE ^



Note: The duration of time isn't directly related to the grade, the goal is to just make sure time is being tracked



## Task Screenshots

Gallery Style: 2 Columns

4

2

1

Files

Winne \_\_i\_html/Module2/problem2.php

19 mins \_\_c\_html/Module2/problem1.php

15 mins \_\_c\_html/Module2/problem3.php

4 mins \_\_bbls\_\_html/Module2/problem3.php

4 mins \_\_bbls\_\_html/index.php

5 sees \_\_ghtpnore

8 sees \_\_ghtpnore

8 sees \_\_ghtpnore

8 sees \_\_ghtpnore

1 sees \_\_ghtpnore

2 sees \_\_ghtpnore

2 sees \_\_ghtpnore

2 sees \_\_ghtpnore

3 sees \_\_ghtpnore

4 secs \_\_ghtpnore

5 sees \_ Projects • jd755-IT202-007 1 hr 19 mins over the Last 7 Days in jd755-IT202-007 under all branches. 🚯

Screenshot showing top of WakaTime

Screenshot showing bottom of WakaTime

End of Task 3

End of Group: Reflection

Task Status: 3/3

**End of Assignment**