
CSCI 4000 Assignment 1

Total estimated time for this assignment: **9 hours** (if you are a good programmer)

The main programming language for this assignment should be **PHP** (mixed with HTML and CSS). If you do not use **PHP**, you will get **0 points**.

When you see “Richard Ricardo” in the example screen captures, change it to **<your name>**.

When you see “Richard” in the example screen captures, change it to **<your first name>**.

If you do not put **<your name>** / **<your first name>** in the above mentioned fields, you will get **0 points** for the question(s).

No two students should submit webpages with exactly the same code, content, layout, or color combination. If found, **both** students will get **0 points**.

Create a folder on your hard disk, name the folder **lastname_firstname_assignment1**. Save all the files from this assignment in this folder.

Create the following subfolders (in the folder **lastname_firstname_assignment1**): **q1, q2, q3**.

As a result, you should have the following folder (directory) structure for this assignment:

- lastname_firstname_assignment1\q1\
- lastname_firstname_assignment1\q2\
- lastname_firstname_assignment1\q3\

Use XAMPP web server solution stack package to help debugging PHP code. It will make your debugging process easier. All php files must not produce any error, or any warning (**-2 points for each error, each warning**). Your program must run. A program that does not run will get at most **50% of the possible points**. All files must begin with a **comment** that identifies the author, the course code, and the program date (**- 2 points each question** if found missing). All html, css and php files must be clearly **documented (commented)**. Points will be taken off (**-2 points each question**) for insufficient comments (`<!-- -->`, `/* */`, `//`).

- Before adding PHP code, all html files must pass html validation at <http://validator.w3.org/> without any **error** (and with only 1 warning).
- When you view page source in a web browser, `<!DOCTYPE html>` must be at the top of every page. In other words, all pages must be written in HTML5. (**-20 points** if not)
 - You **can** put php code before `<!DOCTYPE html>`.
 - You **cannot** put html code before `<!DOCTYPE html>`.
- All css files must pass css validation at <http://jigsaw.w3.org/css-validator/> without any **error**. (**-2 points for each error/warning**, only 1 warning is allowed for html validator)

Question 1 – PHP Chapter 2 (33 points)**Estimated time: 3 hours**

- Save the files in subfolder “**lastname_firstname_assignment1\q1**”. (1 point)
- Create a web page to capture information about **your favorite soccer team**.
- The initial page should look like the one shown below. (3 points)
- **Allow** the user to **enter the information** to the five textboxes. (5 points)
- Create your page using “**<your name>**’s Favorite Soccer Team Page” as the page title. Save the page as **index.htm**. (4 points)
- Save the first page as **index.htm**. Use a HTML form to capture user input. Submit the form to a second file **index_process.php** using the **GET Method**. (5 points)
- The second page **index_process.php** will then be **updated** as shown. (10 points)
- Create a css file named **style.css** to format all pages by creating your own layout (no two students should have the same layout). You can use **the same (or similar) css file(s)** to format all questions. (5 points)

Example: Test case 1 input

The screenshot shows a web browser window with the URL `http://localhost/my_php/ricardo_richard_assignment1/q1/`. The page has a green header with the title "Richard Ricardo's Favorite Soccer Team". Below the header, a message states: "This page will capture the information of Richard Ricardo's favorite soccer team." followed by the instruction "Click on the button below to enter new information". The form contains five input fields:

Team Name:	<input type="text" value="Manchester United"/>
Nickname:	<input type="text" value="The Red Devils"/>
Stadium/Ground:	<input type="text" value="Old Trafford"/>
League:	<input type="text" value="English Premier League"/>
Favorite All-Time Player:	<input type="text" value="Ryan Giggs"/>

At the bottom of the form is a "submit" button.

Example: Test case 1 output

The screenshot shows a web browser window with the URL `http://localhost/my_php/ricardo_richard_assignment1/q1/index_process.php?team=`. The page has a green header with the title "Richard Ricardo's Favorite Soccer Team". Below the header, a message states: "This page displays the information of Richard Ricardo's favorite soccer team." followed by a bulleted list of the submitted information:

- Team Name: Manchester United
- Nickname: The Red Devils
- Stadium/Ground: Old Trafford
- League: English Premier League
- Favorite All-Time Player: Ryan Giggs

At the bottom of the page is a link labeled "back to first page".

Question 2 – PHP Chapter 2 & 8 (33 points)**Estimated time: 3 hours**

- Save the files in subfolder “**lastname_firstname_assignment1\q2**”. (1 point)
- Create web page(s) that displays the cost of a dance ticket as shown. (4 points)
- The user should enter the customer’s **age**. (2 points)
- The output should be a message telling the user what the customer’s dance ticket will cost, based on the following criteria: (12 points for logic)
 - Under age 4 (age < 4), cost is \$3
 - Between ages 4 and 16, cost is \$7
 - Older than 16 (age > 16), cost is \$9
- Create your page(s) using “**<your name>**’s Dance Ticket Price” as the page title(s). (4 points)
- Save the first page as **index.htm**. Use an HTML form to capture user input. Submit the form to a second file **index_process.php** using the **POST method**. (5 points)
- The second page **index_process.php** will then be **updated** as shown. (5 points)
- Create a css file named **style.css** to format all pages by creating your own layout (no two students should have the same layout). You can use **the same (or similar) css file(s)** to format all questions. (5 points)

Example: Test case 1 input

The screenshot shows a web browser window with the URL `http://localhost/my_php/ricardo_richard_assignment1/q2/`. The page has a green header with the title "Richard Ricardo's Dance Ticket Price". Below the header, there is a paragraph: "This page will decide the cost of Richard's dance ticket price based on his customer's age." followed by a bulleted list of pricing rules:

- Under age 4 (age < 4) cost is \$3.00
- Between ages 4 and 16 (4 ≥ age ≤ 16) cost is \$7.00
- Older than 16 (age > 16) cost is \$9.00

 Below the list, there is a prompt "Please enter customer's age" and a text input field containing the number "3". To the right of the input field is the text "years old". Below the input field is a "submit" button.

Example: Test case 1 output

The screenshot shows a web browser window with the URL `http://localhost/my_php/ricardo_richard_assignment1/q2/index_process.php`. The page has the same green header and title as the input page. Below the header, there is the same paragraph and bulleted list of pricing rules. Below the list, there is a message: "The customer is 3 years old, and the cost of Richard's ticket is \$3.00." At the bottom of the page, there is a link labeled "back to first page".

Example: Test case 2 input

http://localhost/my_php/ricardo_richard_assignment1/q2/index.htm

Richard Ricardo's Dance Ticket Price

This page will decide the cost of Richard's dance ticket price based on his customer's age.

- Under age 4 (age < 4) cost is \$3.00
- Between ages 4 and 16 (4 ≥ age ≤ 16) cost is \$7.00
- Older than 16 (age > 16) cost is \$9.00

Please enter customer's age

years old

Example: Test case 2 output

http://localhost/my_php/ricardo_richard_assignment1/q2/index_process.php

Richard Ricardo's Dance Ticket Price

This page will decide the cost of Richard's dance ticket price based on his customer's age.

- Under age 4 (age < 4) cost is \$3.00
- Between ages 4 and 16 (4 ≥ age ≤ 16) cost is \$7.00
- Older than 16 (age > 16) cost is \$9.00

The customer is 10 years old, and the cost of Richard's ticket is \$7.00.

[back to first page](#)

Question 3 – PHP Chapter 2 & 8 (34 points)

Estimated time: 3 hours

- Save the files in subfolder “**lastname_firstname_assignment1\q3**”. (1 point)
- Create a web page that displays the default information (example shown).
- The initial page and related outputs should look like the examples shown below. (4 points)
- Create your pages using “<your name>’s Kung Fu Panda Po Power Level” as the page titles. (4 points)
- Allow the user to **enter a number** representing Kung Fu Panda Po’s power level (2 points).
- The power level conversions are as follows: (12 points for logic)
 - less than 0: Po eats too much pho
 - 0 to 10: Po protects the valley of peace
 - 11 to 20: Po defeats wolf bandits
 - 21 to 30: Po reaches Gongmen City
 - 31 to 40: Po destroys the tower and an arsenal of cannons
 - Greater than 40: Po defeats Lord Shen

- Save the first page as **index.htm**. Use a HTML form to capture user input. Submit the form to a second file **index_process.php** using the **POST method**. (5 points)
- The second page **index_process.php** will then be **updated** as shown. (5 points)
- Create a css file named **style.css** to format all pages by creating your own layout (no two students should have the same layout). You can use **the same (or similar) css file(s)** to format all questions. (5 points)

Example: Test case 1 input

The screenshot shows a web browser window with the URL `http://localhost/my_php/ricardo_richard_assignment1/q3/`. The page title is "Richard Ricardo's Kung Fu Panda Po Power Level". The main content area has a light green background and contains the following text:

This page will prompt Richard Ricardo for Kung Fu Panda Po's power level (in number). The program will convert the given input into Po's power metric.

less than 0: Po eats too much pho
 0 to 10: Po protects the valley of peace
 11 to 20: Po defeats wolf bandits
 21 to 30: Po reaches Gongmen City
 31 to 40: Po destroys the tower and an arsenal of cannons
 Greater than 40: Po defeats Lord Shen

Click on the button below to submit Po's power level.

Po's power level:

Example: Test case 1 output

The screenshot shows a web browser window with the URL `http://localhost/my_php/ricardo_richard_assignment1/q3/index_process.php?power=`. The page title is "Richard Ricardo's Kung Fu Panda Po Power Level". The main content area has a light green background and contains the following text:

This page will prompt Richard Ricardo for Kung Fu Panda Po's power level (in number). The program will convert the given input into Po's power metric.

less than 0: Po eats too much pho
 0 to 10: Po protects the valley of peace
 11 to 20: Po defeats wolf bandits
 21 to 30: Po reaches Gongmen City
 31 to 40: Po destroys the tower and an arsenal of cannons
 Greater than 40: Po defeats Lord Shen

Po's power level is 11.
Po defeats wolf bandits.

[back to first page](#)

Example: Test case 2 input

http://localhost/my_php/ricardo_richard_assignment1/q3/index.htm

Richard Ricardo's Kung Fu Panda Po Power Level

This page will prompt Richard Ricardo for Kung Fu Panda Po's power level (in number). The program will convert the given input into Po's power metric.

less than 0: Po eats too much pho
 0 to 10: Po protects the valley of peace
 11 to 20: Po defeats wolf bandits
 21 to 30: Po reaches Gongmen City
 31 to 40: Po destroys the tower and an arsenal of cannons
 Greater than 40: Po defeats Lord Shen

Click on the button below to submit Po's power level.

Po's power level:

Example: Test case 2 output

http://localhost/my_php/ricardo_richard_assignment1/q3/index_process.php?power=

Richard Ricardo's Kung Fu Panda Po Power Level

This page will prompt Richard Ricardo for Kung Fu Panda Po's power level (in number). The program will convert the given input into Po's power metric.

less than 0: Po eats too much pho
 0 to 10: Po protects the valley of peace
 11 to 20: Po defeats wolf bandits
 21 to 30: Po reaches Gongmen City
 31 to 40: Po destroys the tower and an arsenal of cannons
 Greater than 40: Po defeats Lord Shen

Po's power level is 45.
Po defeats Lord Shen.

[back to first page](#)

Important:

1. If you do not put **<your name>** / **<your first name>** in the above mentioned fields (as shown in the examples), you will get **0 points** for the question(s).
2. **No two students** should submit webpages with exactly the same code, content, layout, or color combination. If found, both students will get **0 points**.

3. Before adding PHP code, all html files must pass html validation at <http://validator.w3.org/> without any **error** (and with only 1 warning). Use the validator's "File Upload" tab to check each file.
 - a. index.htm file must be validated.
 - b. When you view page source in a web browser, `<!DOCTYPE html>` must be at the top of every page. In other words, all pages must be written in HTML5. (-20 points if not)
 - c. You don't need to validate index_process.php after adding php code. If any html error is found, 2 points will be deducted for each error. Please validate the file before adding PHP code.
4. All css files must pass css validation at <http://jigsaw.w3.org/css-validator/> without any **error**.
5. If your files do not pass the html and css validations, **2 points will be deducted for each html or css error** found (no deduction for php error at html validation).
6. Document (comment) your HTML files (`<!-- -->`), CSS files (`/* */`), and PHP files (`/* */` OR `//`). **Points will be taken off** for insufficient comments (`<!-- -->`, `/* */`, `//`).

Submission instructions:

- You need to test all document(s).
- Do screen capture(s) of the **input** and the related **output(s)**. Use any graphic editing software (e.g. Microsoft Paint, Adobe Fireworks, GIMP, or Microsoft Expression Design etc) to cut out the browser output (from the screen capture), paste them into a word document.
- Provide **2 different test cases** for each question. In other words, for **each question**, you may need to have **2 input** screen captures and **2 related output** screen captures.
- Do screen capture(s) of html validation results (index.htm files only) and css validation results (style.css file only), cut and paste them into the word document. If you use the same style.css file, you only need to do screen capture of one style.css file.
- Save the word document as a pdf file.

You need to submit the following:

1. A pdf file containing the screen capture(s) of the web browser input and output pages, and the screen capture(s) of all html validation results (from <http://validator.w3.org/>) and css validation results (from <http://jigsaw.w3.org/css-validator/>), name the file **lastname_firstname_assignment1.pdf**.
2. All html file(s), php file(s), css file(s), and other related files (e.g. image files). Zip your file folder (**lastname_firstname_assignment1**) into a single zip file (or rar file) **lastname_firstname_assignment1.zip**. In the above example, the zip file should contain the following files and subfolders. If there is any image, there should be a `\images\` subfolder.

- lastname_firstname_assignment1\q1\index.htm
- lastname_firstname_assignment1\q1\index_process.php
- lastname_firstname_assignment1\q1\style.css // you may put style.css in a subfolder
- lastname_firstname_assignment1\q2\index.htm
- lastname_firstname_assignment1\q2\index_process.php
- lastname_firstname_assignment1\q2\style.css
- lastname_firstname_assignment1\q3\index.htm
- lastname_firstname_assignment1\q3\index_process.php
- lastname_firstname_assignment1\q3\style.css

Please submit the above mentioned **two files** (.pdf and .zip) to D2L digital dropbox.

Grading guidelines (programming questions):

Your programs will be judged on several criteria, which are shown below.

- Correctness (50%): Does the program compile (run) correctly? Does the program do what it's supposed to do?
- Design (20%): Are operations broken down in a reasonable way (e.g. classes and methods)?

- Style (10%): Is the program **indented** properly? Do variables have **meaningful names**?
- Robustness (10%): Does the program handle erroneous or unexpected input gracefully?
- Documentation (10%): Do all program files begin with a **comment** that identifies the author, the course code, and the program date? Are all the classes, methods and data fields clearly **documented (commented)**? Are unclear parts of code **documented (commented)**? (Some items mentioned may not apply to some languages)

A program that does not compile (run) will get at most **50% of the possible points**.