
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 vehicle**.
- 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 pages using “<your name>’s Vehicle Page” as the page titles (<title> tag). (2 points)
- Save the first page as **index.htm** (2 points). 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. It contains a link to go back to the first page. (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

Richard Ricardo's Vehicle

This page will prompt Richard Ricardo for information on his dream vehicle.

Click on the button below to enter new information

Vehicle Type:

Color:

Year:

Make:

Model:

Example: Test case 1 output

Richard Ricardo's Vehicle

This page displays the information of Richard Ricardo's dream vehicle.

- Vehicle Type: Sedan
- Color: Orange
- Year: 2012
- Make: Ford
- Model: Focus

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Example: Test case 2 input

The screenshot shows a web browser window with the address bar containing 'localhost/my_php/ricardo_richard_assignment1/q1/'. The page title is 'Richard Ricardo's Vehicle'. The main content area has a dark olive green background with a yellow header bar containing the title. Below the header, there is a message: 'This page will prompt Richard Ricardo for information on his dream vehicle. Click on the button below to enter new information'. The form consists of five rows, each with a label and a text input field:

Vehicle Type:	Sports Car
Color:	Red
Year:	2013
Make:	Lamborghini
Model:	Aventador LP 720-4

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

Example: Test case 2 output

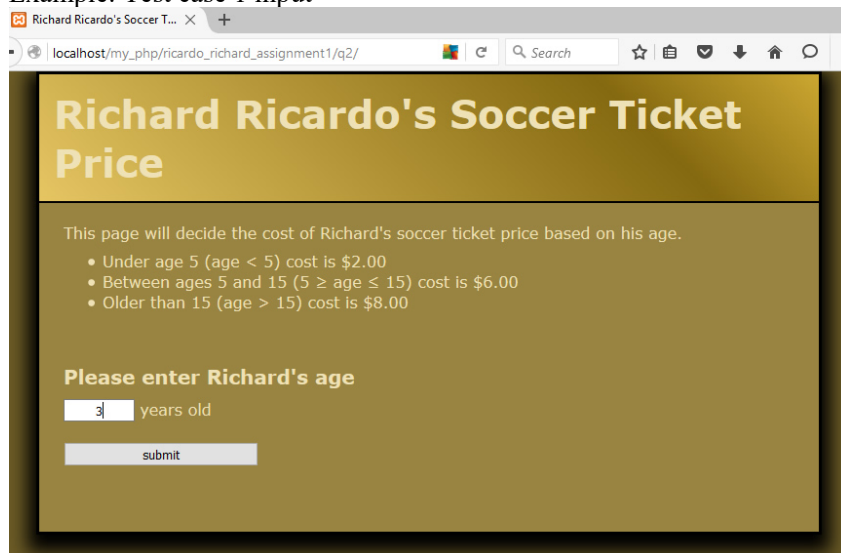
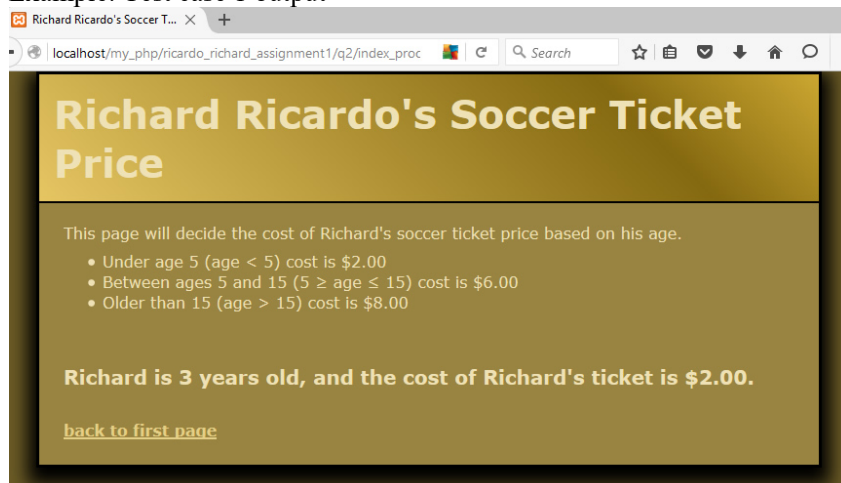
The screenshot shows the same web browser window, but the page content has changed. The header bar still contains the title 'Richard Ricardo's Vehicle'. The main content area now displays: 'This page displays the information of Richard Ricardo's dream vehicle.' Below this, the form data is presented as a list of items:

- Vehicle Type: Sports Car
- Color: Red
- Year: 2013
- Make: Lamborghini
- Model: Aventador LP 720-4

At the bottom of the page, there is a link: [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 soccer ticket as shown. (4 points)
- Allow user to enter his or her **age**. (2 points)
- The output should be a message telling the user what the customer’s soccer ticket will cost, based on the following criteria: (12 points for logic)
 - Under age 5 (age < 5), cost is \$2
 - Between ages 5 and 15, cost is \$6
 - Older than 15 (age > 15), cost is \$8
- Create your pages using “your name’s Soccer Ticket Price” as the page titles (<title> tag). (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 **GET method**. (5 points)
- The second page **index_process.php** will then be **updated** as shown. It contains a link to go back to the first page. (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**Example: Test case 1 output**

Example: Test case 2 input

Richard Ricardo's Soccer Ticket Price

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

- Under age 5 (age < 5) cost is \$2.00
- Between ages 5 and 15 (5 ≥ age ≤ 15) cost is \$6.00
- Older than 15 (age > 15) cost is \$8.00

Please enter Richard's age

years old

Example: Test case 2 output

Richard Ricardo's Soccer Ticket Price

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

- Under age 5 (age < 5) cost is \$2.00
- Between ages 5 and 15 (5 ≥ age ≤ 15) cost is \$6.00
- Older than 15 (age > 15) cost is \$8.00

Richard is 10 years old, and the cost of Richard's ticket is \$6.00.

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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 (<title> tag). (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 noodle
 - 0 to 200: Po reaches the training hall
 - 201 to 400: Po reaches the student barracks
 - 401 to 600: Po reaches the Peach Tree of Heavenly Wisdom
 - 601 to 800: Po climbs the Wu Da Mountains
 - 801 to 1000: Po trains at the Pool of Sacred Tears
 - Greater than 1000: Po defeats Tai Lung

- 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. It contains a link to go back to the first page. (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

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 noodle
 0 to 200: Po reaches the training hall
 201 to 400: Po reaches the student barracks
 401 to 600: Po reaches the Peach Tree of Heavenly Wisdom
 601 to 800: Po climbs the Wu Da Mountains
 801 to 1000: Po trains at the Pool of Sacred Tears
 Greater than 1000: Po defeats Tai Lung

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

Po's power level:

Example: Test case 1 output

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 noodle
 0 to 200: Po reaches the training hall
 201 to 400: Po reaches the student barracks
 401 to 600: Po reaches the Peach Tree of Heavenly Wisdom
 601 to 800: Po climbs the Wu Da Mountains
 801 to 1000: Po trains at the Pool of Sacred Tears
 Greater than 1000: Po defeats Tai Lung

Po's power level is 12.
Po reaches the training hall.

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Example: Test case 2 input

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 noodle
0 to 200: Po reaches the training hall
201 to 400: Po reaches the student barracks
401 to 600: Po reaches the Peach Tree of Heavenly Wisdom
601 to 800: Po climbs the Wu Da Mountains
801 to 1000: Po trains at the Pool of Sacred Tears
Greater than 1000: Po defeats Tai Lung

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

Po's power level:

Example: Test case 2 output

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 noodle
0 to 200: Po reaches the training hall
201 to 400: Po reaches the student barracks
401 to 600: Po reaches the Peach Tree of Heavenly Wisdom
601 to 800: Po climbs the Wu Da Mountains
801 to 1000: Po trains at the Pool of Sacred Tears
Greater than 1000: Po defeats Tai Lung

Po's power level is 888.

Po trains at the Pool of Sacred Tears.

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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 Photoshop, or GIMP 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**.