

# CS4028 Assignment 05 – PHP

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## 1 Invoice Form

### 1.1 Overview

In this assignment your objective is to create a web form and corresponding action (both in PHP) which can be used to generate simple invoices sent out by the fictitious Limerick Laptop, Ltd.

- **form.php** – Web form where an employee can enter the details of a sale, i.e., which laptop model was sold with what options.
- **form-action.php** – PHP Script called from form.php as a form action (action attribute of <form>) when the submit button is pressed. Generates an invoice (including price calculations).

This main functionality is augmented with a very simple settings page that allows to set the preferred currency.

- **settings.php** – Minimal form to pick a currency from **EUR**, **GBP**, or **SEK**.
- **settings-action.php** – Form action called from settings.php (action attribute of <form>). Saves the chosen value in the PHP session variable `$_SESSION["currency"]`.

### 1.2 form.php

- The form should provide fields for the following data:
  - Name
  - Address (text area, 2 lines á 50 characters)
  - City
  - Country (dropdown), can be Ireland, UK, Sweden
  - (ZIP codes are not supported)
  - Choose one model out of: X13, X15, P5000

- Choose one OS out of: Win10, Ubuntu
- Optional features (can choose none, one, or both): Touch Display, SSD

**Invoice Form**

**Address**

Name:

Street Address:

City:

Country:

**Laptop**

Model:  X13,  X15,  P5000

OS:  Win10,  Ubuntu

Options:  Touch,  SSD

### 1.3 form-action.php

- Rules for price calculation

X13	base price 1300 EUR
X15	base price 1500 EUR
P5000	base price 1800 EUR
Win10	0 EUR, i.e., included in the base price
Ubuntu	- 180 EUR (reduction)
Touch Display	+ 250 EUR
Upgrade to SSD	+ 300 EUR

- The output of **form-action.php** should look somewhat like this:

## Invoice

Limerick Laptops, Ltd.  
Plassey Technology Park  
Castletroy, Limerick  
Ireland

### Bill To

Goetz Botterweck  
Tierney Building  
University of Limerick  
Limerick  
Ireland

Category	Item	Amount
<b>Model</b>	P5000	1800 EUR
<b>OS</b>	Windows 10	0 EUR
<b>Options</b>	Touchdisplay	250 EUR
<b>Options</b>	Solid State Disk (SSD)	300 EUR
<b>Total</b>		<b>2350 EUR</b>

- The sender address of Limerick Laptops is fixed.
- The address under "Bill To" is composed from the input in the first input fields.
  - Note that you might have to convert carriage returns entered in the textarea (using the [Enter] key) into line breaks.
- The "Options" lines only show up if the particular options were actually chosen.
- Total shows the total price calculated from the sum of all chosen options.

#### 1.4 Session variable

- Introduce session handling by extending every PHP script with a few lines.
- The session variable `$_SESSION["currency"]` will have the value EUR, GBP, or SEK.
- Default is EUR.

#### 1.5 settings.php

- This form will allow to pick one of EUR, GBP, or SEK from a list of radio buttons.

- It should look somewhat like this:

### Settings

Currency  EUR  
 SEK  
 GBP

#### 1.6 settings-action.php

- This script is called from settings.php as a form action.
- It stores the chosen currency value in the session variable `$_SESSION["currency"]` and gives some feedback message that it has done so. It will then provide a link to jump back to `form.php`.
- The output should look somewhat like this:

### Saving Settings

Currency has been set to 'SEK'.

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- Note that navigating to `settings.php`, then to `settings-action.php`, and finally back to `form.php` will cause the loss of data entered into the invoice form so far, unless additional measures are taken (e.g., saving the data in session variables). We ignore that for this simplified example.

#### 1.7 Augment form.php to include currency

- Expand `form.php` to show the currently set currency in the footer.
- The footer of `form.php` should also provide a link to jump to `settings.php`.
- That should look somewhat like this (see footer at the bottom of the page):

### Invoice Form

**Address**

Name:

Street Address:

City:

Country:

**Laptop**

Model:  X13  
 X15  
 P5000

OS:  Win10  
 Ubuntu

Options:  Touch  
 SSD

[Currency: SEK](#)

### Invoice

Limerick Laptops, Ltd.  
Plassey Technology Park  
Castletroy, Limerick  
Ireland

**Bill To**

Goetz Botterweck  
Mässans gata 24  
Gothia Towers  
Gothenburg  
Sweden

Category	Item	Amount
Model	X15	1500 EUR
OS	Ubuntu Linux	-180 EUR
Options	Solid State Disk (SSD)	300 EUR
<b>Total</b>		<b>1620 EUR</b> 15925 SEK

[Currency: SEK](#)

## 1.8 Augment form-action.php

- If the currency is set to a value different from EUR, use the following conversion factors to calculate a converted total.
  - 1 EUR = 0.89 GBP
  - 1 EUR = 9.83 SEK
- Use `round()` to round the converted total.
- Show the converted total in an additional column after the EUR total.
- If currency is EUR, then omit the additional column.
- For instance, for currency SEK and the input in the previous screenshot, the output should look somewhat like this:

## 1.9 Other Notes

- You should handle the case that initially no currency is defined.

Besides that, to simplify things, we make the following assumptions:

- No input validation (checking for required fields etc.)
- No sanitization of input (e.g., escaping special characters)
- We assume form-action.php just generates a document without changing data. Hence, it is appropriate to use GET as a HTTP method. This avoids annoying confirmation dialogs by the web browser during testing ("Do you really want to resubmit the same data?").