

# Creating forms with input validation the easy way, with this PHP library

One of the most time consuming and hated jobs in webdevelopment is without doubt, creating forms.

Think about the many hours you spend creating contact forms that validated the email address or that upload form that only needs to accept jpg images that are smaller then 300 by 300 pixels.

With EasyForms we make an end to this. EasyForms is a PHP library that helps you create forms on a fast and easy way including input validation.

There is a form builder included so the you can create forms by clicking and filling in some fields.

Togheter with the EasyForm library, you get 5 example forms that are created using this library:

- Contact form
- Image upload with extension and image size validation
- Quote request form
- Subscribe form that adds the email address and name to a CSV file
- Simple login script

A mockup of a 'Personal information' form. The title 'Personal information' is at the top. Below it are two input fields. The first field is labeled 'Name (required)' and has a red error message 'Fill in your name.' below it. The second field is labeled 'Email (required)' and has a red error message 'Fill in your email address.' below it. The form is tilted slightly to the right.

Thank you for purchasing my script. If you have any questions that are beyond the scope of this help file, please feel free to email me at [wim@sitebase.be](mailto:wim@sitebase.be). Thanks so much!

**PHP Version**  
5.x

**MySQL**  
Not needed

**Compatible browsers**  
FireFox 2, FireFox 3, IE6, IE7, IE8, Safari

# Using the EasyForms form builder tool

With this tool you can compose your forms by clicking and filling in some forms.

Upload all the files in the zip to your server and point your browser to the **Composer** directory.

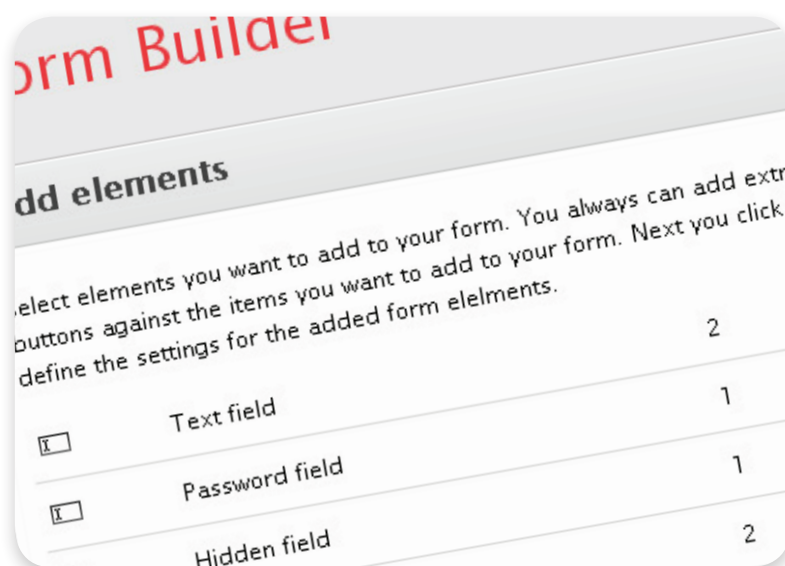
Now you will see the Form builder. First you click on the **Add to form** buttons against the elements you want to add to your form.

Next you scroll down and edit the settings of the elements you added to your form.

After you're done changing the settings you click on the **save button**.

Scroll down to the form settings. Fill in a **title** (for example My mail form) and **name** (for example frmmail) and hit the generate button.

Now you will get a preview of your form. Click on the **Get source** button to get the PHP source for this form or click on the **Back** button to make changes to your form.



# The different form elements and their parameters

Each type of form element has its own class in the library. Below you find a list of the different elements with a list of parameters that you can configure on that element.

## Text field

**Class:** Base\_Text

**Parameters:**

- **label:** The label text that is shown besides the field
- **name:** A name for this field. For example txtemail.
- **value:** Default value that will be shown
- **required:** If this is set to true the field must be filled in
- **validators:** Read the page about validators.
- **description:** An extra description for this field. For example: fill in your email address.

```
$Text = new Base_Text("Email", "txtemail", "", true, null, "What's your email address?");
```

## Password field

**Class:** Base\_Password

**Parameters:**

- **label:** The label text that is shown besides the field
- **name:** A name for this field. For example txtpass.
- **value:** Default value that will be shown
- **required:** If this is set to true the field must be filled in
- **validators:** Read the page about validators.

```
$Password = new Base_Password("Password", "txtpass", "", true, null);
```

## Hidden field

Class: Base\_Hidden

Parameters:

- **name:** A name for this field. For example txthidden.
- **value:** Default value that will be shown
- **validators:** Read the page about validators.

```
$Hidden = new Base_Hidden("txthidden", "default value", null);
```



## Textarea

Class: Base\_Textarea

Parameters:

- **label:** The label text that is shown besides the field
- **name:** A name for this field. For example txtmessage.
- **value:** Default value that will be shown
- **cols:** Number of columns the textarea is width
- **rows:** Number of rows the textarea is high.
- **required:** If this is set to true the field must be filled in
- **validators:** Read the page about validators.
- **description:** An extra description for this field. For example: fill in your email address.

```
$Textarea = new Base_Textarea("Message", "txtmessage", "", 40, 5, true, null, "Tell me a story.");
```



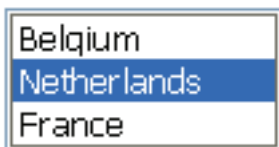
## Select menu

Class: Base\_Select

Parameters:

- **label:** The label text that is shown besides the field
- **name:** A name for this field. For example sltcountry.
- **value:** Key value array that represents the content
- **required:** If this is set to true the field must be filled in
- **default:** The default selected item
- **description:** An extra description for this field. For example: Select your country from the list.

```
$Select = new Base_Select("Country", "sltcountry", array("be" => "Belgium", "nl" => "Netherlands", "fr" => "France"), true, "nl", "Select your country form the list.");
```



## Select list

Class: Base\_List

Parameters:

- **label:** The label text that is shown besides the field
- **name:** A name for this field. For example lstcountry.
- **value:** Key value array that represents the content
- **required:** If this is set to true the field must be filled in
- **size:** Number of items visible.
- **default:** The default selected item
- **description:** An extra description for this field. For example: Select your country from the list.

```
$List = new Base_List("Country", "lstcountry", array("be" => "Belgium", "nl" => "Netherlands", "fr" => "France"), true, 3, "nl", "Select your country form the list.");
```



## Checkbox

Class: Base\_Checkbox

Parameters:

- **label:** The label text that is shown besides the field
- **name:** A name for this field. For example chkaccept.
- **value:** The value that you receive when the checked checkbox is submitted
- **checked:** If true the checkbox is checked
- **required:** If this is set to true the checkbox must be checked
- **description:** An extra description for this field. For example: Do you accept the terms.

```
$Checkbox = new Base_Checkbox("Accept", "chkaccept", "accept", true, true, "Do you accept this?");
```

- ☐ Belgium
- ☒ Netherlands
- ☐ France

## Radiogroup

Class: Base\_List

Parameters:

- **label:** The label text that is shown besides the field
- **name:** A name for this radio group. For example rndcountry.
- **value:** Key value array that represents the content
- **required:** If this is set to true there must be one radio button selected
- **default:** The default selected radio button
- **description:** An extra description for this field. For example: What's your country?

```
$Radiogroup = new Base_Radio("Country", "rndcountry", array("be" => "Belgium", "nl" => "Netherlands", "fr" => "France"), true, "nl", "What's your country?");
```



## File Field

Class: Base\_File

Parameters:

- **label:** The label text that is shown besides the field
- **name:** A name for this field. For example fileupload.
- **required:** If this is set to true the field must be filled in
- **validators:** Read the page about validators.
- **description:** An extra description for this field. For example: Choose an avatar from your PC.

```
$Fileupload = new Base_File("File", "fileupload", true, null, "Choose an avatar from your PC.");
```

Legend

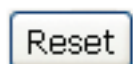
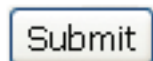
## Fieldset

Class: Base\_Field

Parameters:

- **label:** The label text that is shown.

```
$Fieldset = new Base_Field("Personal information");
```



## Button (submit and reset)

Class: Base\_Submit and Base\_Reset

Parameters:

- **name:** The label text that is shown.
- **Value:** The label on the button

```
$Submit = new Base_Submit("btnsubmit", "Send");
```

## Form

## Form

**Class:** Base\_Form

**Parameters:**

- **label:** The label text for this form
- **name:** A name for this form. For example frmemail.
- **action:** The file that processes the form.

```
$Form = new Base_Form("Email", "frmemail", "email.php");
```

This form object is a bit different from the other EasyForm element (Text, List, ..). That's because the form element has an **Add Method**. With this method you can add other elements to it.

For example if we want to make an email form we first create an email, subject and message field. Then we create a Form element and we add the email, subject and message field to the form. In code this will look like:

```
<?php
include("lib/init.php");

$Email = new Base_Text("Email", "txtemail", "", true, null, "What's your
email address?");
$Subject = new Base_Text("Subject", "txtsubject", "", true, null, "What is
the subject of your email?");
$Message = new Base_Textarea("Message", "txtmessage", "", 40, 5, true,
null, "Tell me your question.");
$Submit = new Base_Submit("btnsubmit", "Send");

$Form = new Base_Form("Email Form", "frmemail");
$Form->Add($Email);
$Form->Add($Subject);
$Form->Add($Message);
$Form->Add($Submit);

echo $Form;
```



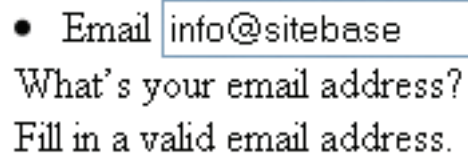
# Validating the form input with validators

The previous email form was a good example of how you can create a simple email form that holds the values of the field after submitting and doing some required field validation. But of course in some cases we want some advanced input validation. For example, in case of the email form we want to validate the email input to see if it is indeed an email address.

Therefore we can use validators. This objects you can add to an element in the validators parameter. Below you'll find the code to add an email validator to the email field.

```
$EmailValidator = new Base_Validators_Email("Fill in a valid email address.");  
  
$Email = new Base_Text("Email", "txtemail", "", true, $EmailValidator, "What's your email address?");
```

You can see that we create a new email validator with as parameter the error that should be shown to the user when it's not a valid email address.



- Email info@sitebase  
What's your email address?  
Fill in a valid email address.

It's also possible to add more than one validator to an input field. For example if we want to validate if it's an email address and we want that the email address contains the string "hotmail.com" we can use this code.

```
$EmailValidator = new Base_Validators_Email("Fill in a valid email address.");  
$ContainsValidator = new Base_Validators_Contains("It must be an hotmail address.", "hotmail.com");  
  
$Email = new Base_Text("Email", "txtemail", "", true, array($EmailValidator, $ContainsValidator), "What's your email address?");
```

You can see that we created two validators and added them as an array to the email field.

# An overview of the validators and their parameters

## Email validation

**Class:** Base\_Validators\_Email

**Parameters:**

- **message:** The message to show when invalid

## Number validation

**Class:** Base\_Validators\_Integer

**Parameters:**

- **message:** The message to show when invalid
- **min:** The minimum value of the number
- **max:** The maximum value of the number

*If you don't want to use a parameter, set it to null.*

## Contains validation

**Class:** Base\_Validators\_Contains

**Parameters:**

- **message:** The message to show when invalid
- **contains:** The string that the input must contain to be a valid input.

## File validation

This validator can be used to validate a file from an filefield. You can limit the size or the type of file.

This type of validator can be added to a Base\_File element.

**Class:** Base\_Validators\_File

**Parameters:**

- **message:** The message to show when invalid
- **maxsize:** The maximum size of the file in bytes
- **extensions:** An array of allowed extensions. For example you can use array("jpg", "png", "gif");
- **mimes:** An array of allowed mime types.

*If you don't want to use a parameter, set it to null.*

## Image validation

This validator can be used to validate the height and width of an image.

**Class:** Base\_Validators\_Image

**Parameters:**

- **message:** The message to show when invalid
- **width:** The maximum width
- **height:** The maximum height

*If you don't want to use a parameter, set it to null.*

# Processing the form data when it is valid

The last thing to do is processing the form data when it's valid. Therefore we create a function somewhere in the PHP file that receives one parameter. This parameter contains the valid form data.

```
<?php
include("lib/init.php");
$EmailValidator = new Base_Validators_Email("Fill in a valid email address.");
$ContainsValidator = new Base_Validators_Contains("It must be an hotmail address.", "hotmail.com");
$Email = new Base_Text("Email", "txtemail", "", true, array($EmailValidator, $ContainsValidator), "What's your email address?");
$Subject = new Base_Text("Subject", "txtsubject", "", true, null, "What is the subject of your email?");
$message = new Base_Textarea("Message", "txtmessage", "", 40, 5, true, null, "Tell me your question.");
$Submit = new Base_Submit("btnsubmit", "Send");

$Form = new Base_Form("Email Form", "frmemail");
$Form->Add($Email);
$Form->Add($Subject);
$Form->Add($Message);
$Form->Add($Submit);
$Form->SetPhpCallback("formHandle");

if(!$Form->Processed()){
    echo $Form;
}else{
    echo "<p>Thank you</p>";
}
function formHandle($data){
    echo $data['txtemail'] . "<br />";
    echo $data['txtsubject'] . "<br />";
    echo $data['txtmessage'] . "<br />";
}
```

Notice the `$Form->SetPhpCallback("formHandle");` line. This tells the form that when it's submitted and all values are valid. That it must execute the `formHandle` function with as first parameter an array of all input data.

The regular `echo $Form` is also replaced with an if else construction to hide the form and show a message to the user when the form is valid submitted.

To test this script you can test the file `/Examples/DocumentationExample.php`.

# Overview of the CSS classes to style your form.

In the image you see an example of the code that is generated by EasyForm. This is the form we created in previous page.

```
<form id="frmemail" enctype="multipart/form-data" method="post" action="" name="frmemail">
  <fieldset>
    <legend>Email Form</legend>
    <li id="li_txtemail" class="error">
      <label id="label_txtemail" class="required" for="txtemail">Email</label>
      <input id="txtemail" class="required" type="text" value="" name="txtemail"/>
      <div id="description_txtemail" class="description">What's your email address?</div>
      <div id="error_txtemail" class="errorMessage">Fill in a valid email address.</div>
    </li>
    <li id="li_txtsubject">
      <input id="txtsubject" type="text" value="" name="txtsubject"/>
    </li>
    <li id="li_txtmessage" class="error">
      <div id="description_txtmessage" class="description">What's your message?</div>
      <div id="error_txtmessage" class="errorMessage">Fill in a valid message.</div>
    </li>
    <li id="li_btnsubmit">
      <input id="formtag" type="hidden" value="frmemail" name="formtag"/>
    </li>
  </fieldset>
</form>
```

If an input field is submitted and its not valid the parent li element will get an error class and the error message will show up. Like you can see on the li\_txtemail.

As you can see the li\_txtsubject is valid because it hasent got a class="error".

If the input field is required the label and the input contains a class required.

If you filled in the description for your element, the li item contains a div with class description.

With a bit of imagination and CSS knowledge you will create beautifull forms in no time.

Look at the examples for some inspiration.

The image shows two overlapping contact forms. The background form is titled "CONTACT FORM" and includes sections for "Personal information" (Name, Email), "Message" (Subject, Message), and a "Send" button. The foreground form is titled "Details" and includes sections for "Visitors/Month" (radio buttons), "I developed this site" (checkbox), "Description" (text area), and a "Send" button. Both forms include required field indicators and error messages.