

Chapter 22

How to send email

Protocols used in sending email

- SMTP
- POP3
- IMAP

Key terms

- Email client
- Email server

Objectives

Applied

1. Use PHPMailer to send email messages from your web applications.

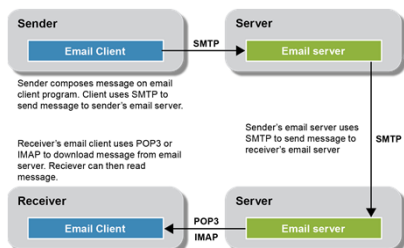
Knowledge

1. In general, describe how you access and use PHPMailer to connect to an SMTP server and send email.
2. Describe the use of a helper function for sending email with PHPMailer.

How to create a Gmail account for email testing

1. If you don't already have a Gmail account, create one.
2. Log in to your Gmail account and go to your Inbox.
3. At the top of the page, select the Settings icon and then the Settings link.
4. On the Settings page, click the Forwarding and POP/IMAP tab.
5. In the POP Download section, select the "Enable POP for all mail" option.
6. Click the Save Changes button.

How email is sent



The PHPMailer 5.2 directory that's included with this book's download

`/xampp/htdocs/book_apps/PHPMailer`

The GitHub URL that provides more recent versions of PHPMailer

<https://github.com/PHPMailer/PHPMailer>

How to use PHPMailer to send an email

Step 1: Load the PHPMailer classes

```
set_include_path('/xampp/htdocs/book_apps/PHPMailer');
require_once 'PHPMailerAutoload.php';
```

Step 2: Create the PHPMailer object

```
$mail = new PHPMailer();
```



A helper function for sending an email

```
<?php
set_include_path('/xampp/htdocs/book_apps/PHPMailer');
require 'PHPMailerAutoload.php';

function send_email($to_address, $to_name, $from_address,
    $from_name, $subject, $body, $is_body_html = false) {
    if (!valid_email($to_address)) {
        throw new Exception('This To address is invalid: ' .
            htmlspecialchars($to_address));
    }
    if (!valid_email($from_address)) {
        throw new Exception('This From address is invalid: ' .
            htmlspecialchars($from_address));
    }

    $mail = new PHPMailer();
    // **** Change to match your SMTP server and account info
    $mail->isSMTP();
    $mail->Host = 'smtp.gmail.com';
    $mail->SMTPSecure = 'tls';
    $mail->Port = 587;
    $mail->SMTPAuth = true;
    $mail->Username = 'YOUR_USERNAME@gmail.com';
    $mail->Password = 'YOUR_PASSWORD';
```



How to use PHPMailer to send an email (cont.)

Step 3: Set the parameters for the PHPMailer object

```
$mail->isSMTP();
$mail->Host = 'smtp.gmail.com';
$mail->SMTPSecure = 'tls';
$mail->Port = 587;
$mail->SMTPAuth = true;
$mail->Username = 'YOUR_USERNAME@gmail.com';
$mail->Password = 'YOUR_PASSWORD';

$mail->setFrom('johndoe@example.com', 'John Doe');
$mail->addAddress('janedoe@example.com', 'Jane Doe');
$mail->Subject = 'PHPMailer Test';
$mail->Body = '<p>This body uses HTML to make text
<b>bold!</b></p>';
$mail->AltBody = 'This body does not use HTML.';
$mail->isHTML(true);
```



A helper function for sending an email (continued)

```
// Set From address, To address, subject, and body
$mail->setFrom($from_address, $from_name);
$mail->addAddress($to_address, $to_name);
$mail->Subject = $subject;
$mail->Body = $body;
$mail->AltBody = strip_tags($body);
if ($is_body_html) {
    $mail->isHTML(true);
}

if(!$mail->send()) {
    throw new Exception('Error sending email: ' .
        htmlspecialchars($mail->ErrorInfo) );
}

function valid_email($email) {
    if (filter_var($email, FILTER_VALIDATE_EMAIL) === false) {
        return false;
    } else {
        return true;
    }
}
?>
```



How to use PHPMailer to send an email (cont.)

Step 4: Use the PHPMailer object to send the email

```
if ($mail->send()) {
    echo '<p>Message has been sent by PHPMailer.</p>';
} else {
    echo '<p>Message could not be sent by PHPMailer.</p>';
    echo '<p>Error: ' . $mail->ErrorInfo . '</p>';
}
```



How to use the helper function

```
<?php
require_once 'message.php';

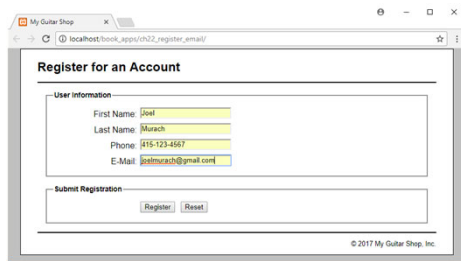
$from_address = 'johndoe@example.com';
$from_name = 'John Doe';
$to_address = 'janedoe@example.com';
$to_name = 'Jane Doe';

$subject = 'How to use PHPMailer';
$body = '<p>The Murach PHP and MySQL book has a chapter on how to use
<a href="https://github.com/PHPMailer/PHPMailer">PHPMailer</a>
to send email.</p>';
$is_body_html = true;

try {
    send_email($to_address, $to_name, $from_address, $from_name,
        $subject, $body, $is_body_html);
    echo '<p>Mail was sent successfully.</p>';
} catch (Exception $e) {
    echo '<p> ' . $e->getMessage() . '</p>';
}
?>
```



Register view of the Registration application



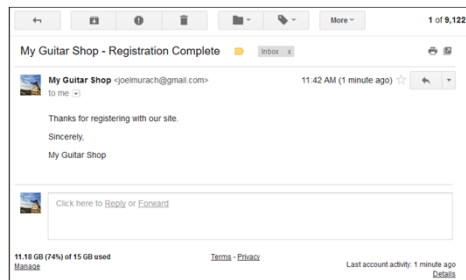
The controller (index.php) (continued)

```

case 'register':
    // Copy form values to local variables
    $first_name = trim(filter_input(INPUT_POST, 'first_name'));
    $last_name = trim(filter_input(INPUT_POST, 'last_name'));
    $phone = trim(filter_input(INPUT_POST, 'phone'));
    $email = trim(filter_input(INPUT_POST, 'email'));

    // Set up email variables
    $to_address = $email;
    $to_name = $first_name . ' ' . $last_name;
    $from_address = 'YOUR_USERNAME@gmail.com';
    $from_name = 'My Guitar Shop';
    $subject = 'My Guitar Shop - Registration Complete';
    $body = '<p>Thanks for registering with our site.</p>' .
        '<p>Sincerely,</p>' .
        '<p>My Guitar Shop</p>';
    $is_body_html = true;
    
```

The email sent by the Registration application



The controller (index.php) (continued)

```

// Send email
try {
    send_email($to_address, $to_name,
        $from_address, $from_name,
        $subject, $body, $is_body_html);
    include 'view/success.php';
} catch (Exception $ex) {
    $error = $ex->getMessage();
    include 'view/register.php';
}
break;
}
??
    
```

The controller (index.php)

```

<?php
require_once('model/message.php');

$action = filter_input(INPUT_POST, 'action');
if ($action === NULL) {
    $action = 'reset';
} else {
    $action = strtolower($action);
}

switch ($action) {
    case 'reset':
        // Reset values for variables
        $first_name = '';
        $last_name = '';
        $phone = '';
        $email = '';

        // Load view
        include 'view/register.php';
        break;
    
```

Register view (view/register.php)

```

<?php include 'header.php'; ??
<main>
    <form action="." method="post" >
    <fieldset>
        <legend>User Information</legend>

        <?php if (isset($error)) : ??
        <p class="error"><?php echo htmlspecialchars($error); ?></p>
        <?php endif; ??

        <label>First Name:</label>
        <input type="text" name="first_name"
            value="<?php echo htmlspecialchars($first_name); ?>"
        <br>

        <label>Last Name:</label>
        <input type="text" name="last_name"
            value="<?php echo htmlspecialchars($last_name); ?>"
        <br>
    
```

Register view (view/register.php) (continued)

```

<label>Phone:</label>
<input type="text" name="phone"
  value="<?php echo htmlspecialchars($phone);?>"><br>

<label>E-Mail:</label>
<input type="text" name="email"
  value="<?php echo htmlspecialchars($email);?>"><br>
</fieldset>
<fieldset>
  <legend>Submit Registration</legend>

  <label>&nbsp;</label>
  <input type="submit" name="action" value="Register"/>
  <input type="submit" name="action" value="Reset" /><br>
</fieldset>
</form>
</main>
<?php include 'footer.php'; ?>

```

Success view (view/success.php)

```

<?php include 'header.php'; ?>
<main>
  <h2>Success</h2>
  <p>The following registration information has been successfully
  submitted.</p>
  <ul>
    <li>First Name: <?php echo htmlspecialchars($first_name); ?>
    </li>
    <li>Last Name: <?php echo htmlspecialchars($last_name); ?>
    </li>
    <li>Phone: <?php echo htmlspecialchars($phone); ?></li>
    <li>Email: <?php echo htmlspecialchars($email); ?></li>
  </ul>
</main>
<?php include 'footer.php'; ?>

```