

# PHP

Setting up a server for PHP  
Writing PHP pages  
Overcoming statelessness  
Difficulties of Web Engineering



## Set up your own server...

- Million ways to do it...
- Download separately from...
  - Apache – <http://httpd.apache.org>
  - MySQL – <http://www.mysql.com>
  - PHP – [www.php.net](http://www.php.net)
    - heaps of useful documentation at this site
  - phpMyAdmin – <http://www.phpmyadmin.net>
  - Then some configuring to do – web helps, e.g. [www.webmasterstop.com/48-0.html](http://www.webmasterstop.com/48-0.html)
- Or one stop shop... e.g.
  - phpdev – <http://www.firepages.com.au>
  - AppServ – <http://www.appservnetwork.com>

## Personalise the pages...

- How about: each page in the site displays
  - a login name
  - the length of the visit
- Use *cookies* to store this information
  - Cookie
    - text file, up to 4000 characters
    - stored on CLIENT
    - sent along with every HTTP request to the domain/site associated with the cookie

## Setting a cookie

- PHP function setcookie, taking up to 6 args
  - name – string
  - value – string
  - expiry – seconds since 1970
  - last three for security/availability of cookies
- This must happen before *any* HTML code on the page appears
  - cookie details are part of the header information

## Panic over cookies...

- Viewed as the plague...
  - contain viruses
  - somehow pick up all our details
- This is not true in general
  - and many e-commerce sites depend on them, as we shall see...
  - but some sites do use them cleverly to track user behaviour
    - see in particular DoubleClick's technique

## Personalised info on client or server?

- Can use **sessions** for server-side storage...
- In the header, before any HTML, must place
  - `session_start()`
- Other useful functions
  - `session_register( "variable_name"`)
  - `session_is_registered( "variable_name" )`

## How are sessions recognised?

- A cookie can be used – PHPSESSID
  - sent with every request to the web site
  - contains an identifier for this session, created on the first call to `session_start`
- On the server
  - session variables are stored in a file named using the session id contained in the cookie
- Alternatively, this session id can be passed from page to page in the URL

## Security implications?

# Difficulties of web engineering

- Short development life-cycle times
  - typically up to 3 months only
- Increase delivery of bespoke solutions
  - traditionally, systems developed away from the data
  - web systems develop in tandem with the data they operate over
    - consider the example we just constructed

- Multidisciplinary development teams
  - Domain experts
  - Business experts
  - Creative designers
  - Software engineers
  - Team leaders
- Requirements analysis and evaluation
  - shifting user base
  - end users are customers, not employees