

Assignment 2

Online Booking System
Part I

Outline

1. Assignment 2
2. Handin Method
3. "booking.php" Script

Assignment 2

1. Object:

Implement an online booking system of the badminton court of the SAR school

2. Based on:

booking.php

3. Code:

dayview.php

Assignment 2(Cont.)

Function Requirement (dayview.php):

1. Show the correct information about the selected day acquire from booking.php
2. Display a correct timetable for booking Time: **9:00am-6:00pm** Interval: **1 hour**
3. Three buttons:
 1. **View**: If the timeslot is already booked, display the detail (time, user)
 2. **Book**: if the time slot is available, user can click and finish booking
In part I, require: click this button, open "book.php" in a **new window**
 3. **Close**: close this windowIn fact, in part I only the latter 2 buttons is effective and shown on the screen.

Assignment 2(Cont.)

book.php

- In this part, the content of this file is provided:

```
<?php
phpinfo();
?>
```
- You can use the above lines to test your transfer
- In sum, you should focus on "dayview.php" file and fulfill all the required functions
 - Certainly, you can design your own timetable, considering beauty. But there is no bonus mark for this decoration.
 - The central criterion in this assignment is **functional correctness and completeness**.

Handin Method

Must through web-handin

- Hardcopy handin is not accepted
- <http://assignmentbox.cs.hku.hk:9000/handin/>

Format:

- <your university no.>.zip
- Enclose your "dayview.php" file

booking.php

Function:

1. Display a monthly calendar for choice
Initial view: the current month
2. Month switch
Click two buttons:
 - Forward (>): next month
 - Backward(<): previous month
3. Link to "dayview.php"
Click a particular day

```

<?php
    /* Booking.php
     * Display a calendar and allow user to move forward and backward
     * through months via form controls.
     */
    $month = last month displayed
    $year = last year displayed

    Form control (POST) Next = Next month
    Form control (POST) Prev = Previous month
    */

    // Globals for easy reference
    global $month, $year;

    // Get the variables from POST
    function get_vars() {
        global $month, $year;
        foreach($_POST as $key => $value) {
            $$key = $value;
        }
    }

```

Comments

POST Method to receive information from the former URL
\$_POST[] array

```

// Set up the date to display
function set_date() {
    global $month, $year;
    // Get POST data
    get_vars();
    // If Next, then move month forward
    if ($_POST["Next"] == ">>") {
        $month = $month + 1;
        if ($month == "13") {
            $year = $year + 1;
            $month = 1;
        }
    }
    // If Prev, then move month backward
    else if ($_POST["Prev"] == "<<") {
        $month = $month - 1;
        if ($month == "0") {
            $year = $year - 1;
            $month = 12;
        }
    }
    else { //set today
        $month=date('n');
        $year=date('Y');
    }
}

```

Get variables

if the action is click the ">>"
In PHP, the value in an array could be any value

Same as forward

When the user not click "<<" and ">>"
Then it is to show the initial date (Today)

Only 3 actions can evoke set_date():<<, >>, refresh/Open the webpage

```

// Display the calendar form
function display_cal($month,$year) {
    // Determine today to mark it accordingly
    $today = date("n-j-Y");
    // Build calls to script, include calendar var if
    // it has been set (!= default TRUE)
    $this_script = $_SERVER['PHP_SELF'];
    $reset_script = $this_script;
    // Get timestamp for first day of current month/year
    $timestamp = strtotime($year."-".$month.".01");
    // What's the last day of this month? (28-31)
    $lastday = date('t',$timestamp);
    // What weekday does the first fall on?
    $weekday = date('w',$timestamp);
    // Set monthtext and dow display according to size
    // of calendar
    $tblsize = 100;
    $dow = array("Sunday", "Monday", "Tuesday", "Wednesday",
                "Thursday", "Friday", "Saturday");
    $monthtext = date('F', $timestamp);

```

n: Numeric representation of a month, without leading zeros;
j: Day of the month without leading zeros;
Y: 4 digit representation of a year

The filename of the currently executing script: record for screen refresh

Sintime:
Parse about any English textual datetime description into a timestamp

t: Number of days in the given month
w: Numeric representation of the day of the week(0 for sun.)
F: A full textual representation of a month, such as January or March; e.g. January,...

```

// Print calendar header info
print '<<!HTML><html><title>Calendar</title><body>';
// HTML form
// HTML comment
<!-- Script control vars -->
<input type="hidden" name="month" value="$month" />
<input type="hidden" name="year" value="$year" />
<!-- Month header with Prev/Next buttons -->
<table border="1">
<tr>
<td colspan="2" align="left">
<input type="submit" name="Prev" value="<<" />
</td>
<td colspan="3" align="center">
<strong>
<a href="$reset_script">$monthtext $year</a>
</strong>
</td>
<td colspan="2" align="right">
<input type="submit" name="Next" value=">>" />
</td>
</tr>
<!-- Day of week header row -->
<tr>
<td width="$tblsize"><center><font color=red><b>$dow[0]</b></font></center></td>
<td width="$tblsize"><center><b>$dow[1]</b></center></td>
<td width="$tblsize"><center><b>$dow[2]</b></center></td>
<td width="$tblsize"><center><b>$dow[3]</b></center></td>
<td width="$tblsize"><center><b>$dow[4]</b></center></td>
<td width="$tblsize"><center><b>$dow[5]</b></center></td>
<td width="$tblsize"><center><b>$dow[6]</b></center></td>
</tr>
<!-- Calendar starts here -->

```

print body

tr: Defines a row in a table.
td: Defines a cell in a table.
strong: Renders as strong emphasized text
colspan: indicate how many columns a cell should take up
href: indicates the URL being linked to

The value of "<<",">>" is used to distinguish the action, just as we have said

```

// Skip days of week up to first day of month
print '<tr> \n';
for ($x = 0; $x < $weekday; $x++) {
    print "<td align='right' valign='top' height=\"$tblsize\">";
    print " ";
    print "</td>\n";
}

// Step through month, 1st through last day (28, 30, or 31)
// Print table cell for each
for ($x = 1; $x <= $lastday; $x++) {
    // Close row after each Sat, start next row with Sunday (0)
    if ($weekday == "7") {
        print "</tr>\n<tr>";
        $weekday = 0;
    }
    print "<td align='right' valign='top' height=\"$tblsize\">";
    $ndate=$year . "-". $month . "-". $x;
    if (strlen($month)==1) { $ndate = $ndate . '0'; }
    $ndate=$ndate . $month . "-". $x;
    if ($x<10) { $ndate = $ndate . '0'; }
    $ndate=$ndate . $x;
}

```

nbsp: a default value for an empty variable
(Compare with print nothing: it will make table backgrounds work properly)

Print from 1st day to the last day of the month

range of \$weekday is [0, 6]

\$ndate: store the date to be print in the table yyyy-mm-dd

```

print "<a href=\"./dayview.php?date=$ndate\" target=_blank><"; // If today is today, highlight it with green font
if ($today == $month . "-" . $x . "-" . $year) {
    print "<font color=\"#00ff00\">>"; // When click the date, transfer to "dayview.php" with "$ndate" "target..." open in a new window
    if ($wday == '0') { // color: (rrggbb)
        print "<font color=\"#ff0000\">>"; // OORFOO: green, ff0000: red
    }
    print "</font>"; // the green font is drawn only once (today), so shut down
}
else if ($wday == '0') {
    print "</a></td>\n";
    $wday++;
}

// Close out row
while ($wday < 7) { // print the left day cell as empty (fill the last week)
    print "<td align='right' valign='top' height=\"$tblsize\">&ampnbsp</td>\n";
    $wday++;
}

// Close open tags and page
print <<<HTML
</tr>
</table>
</form>
</body>
HTML;
}

```

ending tag

```

// Main program body
// Set the dates to display
set_date();
// Display the calendar
display_cal($month,$year,$calendar);

?>

```