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<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
    <meta http-equiv="content-type" content="text/html; charset=utf-8"/>
    <title>Journey Calculator</title>
</head>
<body>
<?php #a combination of ch3 and ch13 (item3) review and pursue solutions

function create_radio($value, $button_name){
    echo '<input type="radio" name="' . $button_name . '" value="' . $value . '"';
    if (isset($_POST[$button_name]) && ($_POST[$button_name] == $value)){
        echo ' checked = "checked"';
    }
    echo " /> $value \n";
}
//end of function
if ($_SERVER['REQUEST_METHOD']=='POST'){
    $distance = (isset($_POST['distance'])) ? filter_var($_POST['distance'], FILTER_VALIDATE_FLOAT, FILTER_FLAG_ALLOW_FRACTION) : NULL;
    $speed = (isset($_POST['speed'])) ? filter_var($_POST['speed'], FILTER_VALIDATE_FLOAT, FILTER_FLAG_ALLOW_FRACTION) : NULL;
    $fuel = (isset($_POST['fuel'])) ? filter_var($_POST['fuel'], FILTER_VALIDATE_FLOAT, FILTER_FLAG_ALLOW_FRACTION) : NULL;
    $efficiency = (isset($_POST['efficiency'])) ? filter_var($_POST['efficiency'], FILTER_VALIDATE_INT, array('min_range'=>10,'max_range'=> 50)) : NULL;//min and max not very useful here

    if (($distance > 0) && ($fuel > 0) && ($speed > 0) && ($efficiency > 0)){
        $cost = ($distance/$efficiency)*$fuel;
        $time = $distance/$speed;

        echo '<p>Cost of a journey of ' . number_format($distance,2) . ' miles at $ ' .
number_format($fuel,2) . ' per gallon is $' . $cost . '</p>';
        if ($time > 24){//if the journey time is more than 24 hours
            $days = $time/24;//divide by 24 hours
            $days = round($days);//round the answer down to nearest whole number
            $hours = $time%24; //modulus
            echo '<p>The journey will take you: ' . $days . ' days and ' .
number_format($hours,2) . ' hours</p>';
        }else{
            echo '<p>The journey will take you ' . number_format($time,2) . ' hours.</p>';
        }
    }else{//invalid input
        echo '<h1>Error</h1>
<p class="error">Please enter a valid distance, speed, price per gallon and fuel
efficiency.</h1>';
    }
}
?>
<h2>Journey Calculator</h2>
<form action="radio_review.php" method="post">
    <p>Average Speed: <input type="text" name="speed" value="<?php if (isset($_POST['speed'])) echo $_POST['speed']; ?>"/></p>
    <p>Distance in Miles: <input type="text" name="distance" value="<?php if (isset($_POST['distance'])) echo $_POST['distance']; ?>"/></p>
    <p>Fuel Efficiency: <select name="efficiency">
        <option value="10" <?php if (isset($_POST['efficiency']) && ($_POST['efficiency'] == 10)) echo 'selected = "selected"'; ?>>Terrible</option>
        <option value="20" <?php if (isset($_POST['efficiency']) && ($_POST['efficiency'] == 20)) echo 'selected = "selected"'; ?>>Decent</option>
        <option value="30" <?php if

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(isset($_POST['efficiency']) && ($_POST['efficiency'] == 30)) echo 'selected = "selected"'; ?>>Good</option>
<option value="50" <?php if
(isset($_POST['efficiency']) && ($_POST['efficiency'] == 50)) echo 'selected = "selected"'; ?
>>Excellent</option>
</select></p>
<?php
//create fuel price radio buttons using a loop
$fuel_price = array('3.00', '3.50', '4.00'); //create array
$number = count($fuel_price); //count items in array

echo "<p>Fuel Price :";
    $x = 0; //initialize $x
    while ($x < $number ) { //while loop $x is less than the number of items in array
        create_radio($fuel_price[$x], 'fuel'); //call function
        $x++; //add 1 to $x
    } //end while loop

echo "</p>";
?>
<input type="submit" name="submit" value="Submit" />

</form>
</body>
</html>

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