

122B2B302 Ritish Shelke

Assignment no 5

Findarea.php

```
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-
width, initial-scale=1.0">

    <title>Document</title>

    <link rel="stylesheet" href="style.css">

</head>

<body>

<form method="post" action="" class="form">

<div class="first">

<label class="particles-checkbox-container">

    <input type="radio" class="particles-checkbox"
name="shape" value="triangle"
onclick="showParameters('triangle')">

    <span>Triangle</span>

</label>

<label class="particles-checkbox-container">

    <input type="radio" class="particles-checkbox"
name="shape" value="square"
onclick="showParameters('square')">

    <span>Sqaure</span>

</label>

<label class="particles-checkbox-container">

    <input type="radio" class="particles-checkbox"
name="shape" value="circle"
onclick="showParameters('circle')">

    <span>Circle</span>

</label>

</div>

<div class="second">

<div class="shape-parameters" id="triangle-params">
```

```
Base: <input type="text" name="base"
class="parameter"><br>

Height: <input type="text" name="height"
class="parameter"><br>

</div>

<div class="shape-parameters" id="square-params">

    Side: <input type="text" name="side"
class="parameter"><br>

</div>

<div class="shape-parameters" id="circle-params">

    Radius: <input type="text" name="radius"
class="parameter"><br>

</div>

<button type="submit" class="btn" style="margin-top:
10px; margin-bottom:20px;">Calculate</button>

<?php

class Shape {

    protected $name;

    public function __construct($name) {

        $this->name = $name;

    }

    public function getName() {

        return $this->name;

    }

    public function calculateArea() {

        // Base class method, to be overridden by
subclasses

        return 0;

    }

}

class Triangle extends Shape {

    private $base;

    private $height;

    public function __construct($base, $height) {

        parent::__construct("Triangle");

        $this->base = $base;

        $this->height = $height;
```

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    }

    public function calculateArea() {
        return 0.5 * $this->base * $this->height;
    }
}

class Square extends Shape {
    private $side;

    public function __construct($side) {
        parent::__construct("Square");
        $this->side = $side;
    }

    public function calculateArea() {
        return $this->side * $this->side;
    }
}

class Circle extends Shape {
    private $radius;

    public function __construct($radius) {
        parent::__construct("Circle");
        $this->radius = $radius;
    }

    public function calculateArea() {
        return M_PI * $this->radius * $this->radius;
    }
}

if (isset($_POST['shape'])) {
    $selectedShape = $_POST['shape'];

    switch ($selectedShape) {
        case 'triangle':
            $triangle = new Triangle($_POST['base'],
            $_POST['height']);

            echo "Area of " . $triangle->getName() . ": " .
            $triangle->calculateArea();

            break;

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        case 'square':
            $square = new Square($_POST['side']);

            echo "Area of " . $square->getName() . ": " .
            $square->calculateArea();

            break;

        case 'circle':
            $circle = new Circle($_POST['radius']);

            echo "Area of " . $circle->getName() . ": " . $circle-
            >calculateArea();

            break;

        default:
            echo "Please select a shape.";

            break;
    }
}
?>
</div>
</form>
</body>
<script>

    function showParameters(shape) {

        // Hide all shape parameter divs

        document.querySelectorAll('.shape-
        parameters').forEach(function (div) {

            div.style.display = 'none';

        });

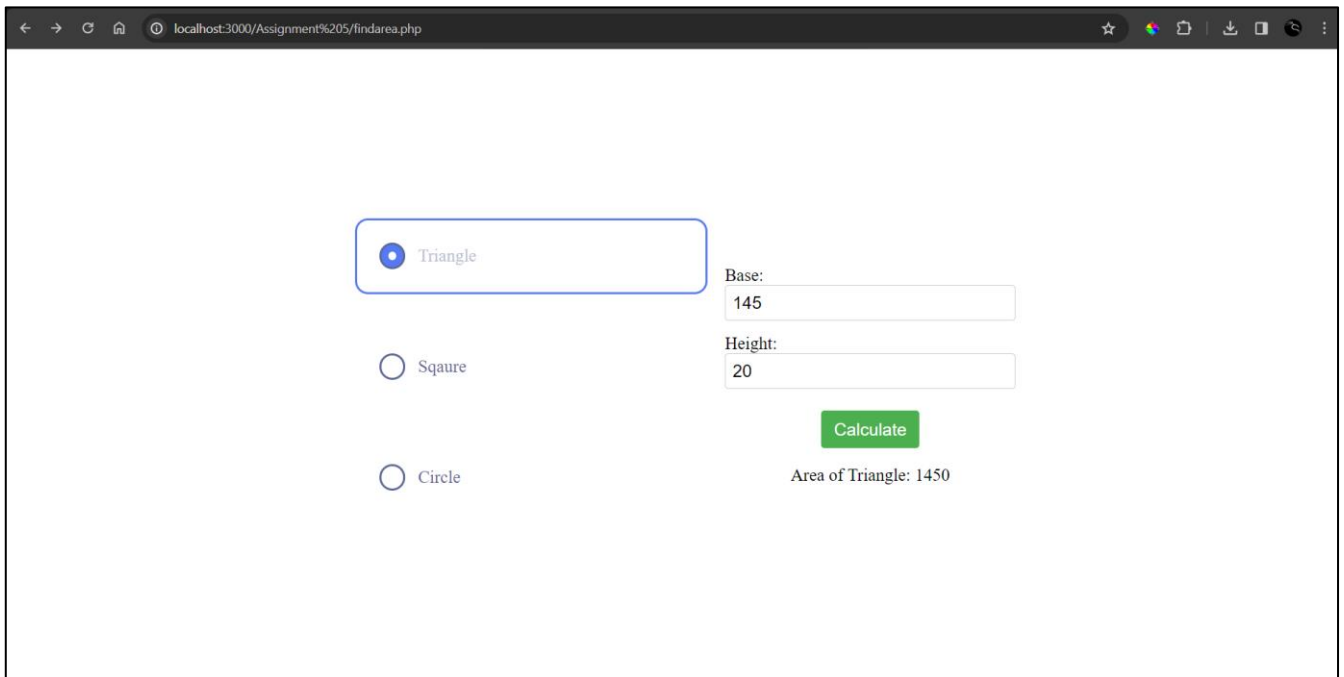
        // Show the selected shape parameter div

        document.getElementById(shape + '-
        params').style.display = 'block';

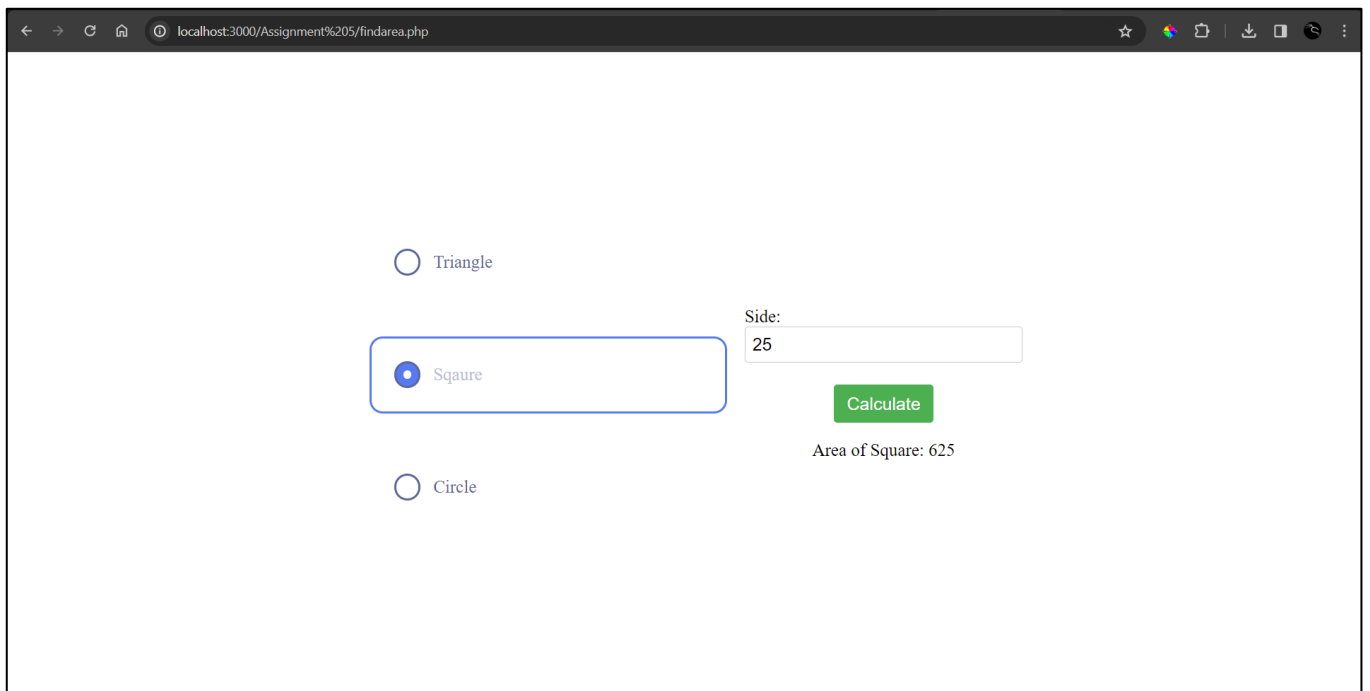
    }
</script>
</html>

```

Output:



A screenshot of a web browser window displaying a form titled 'findarea.php'. The browser's address bar shows 'localhost:3000/Assignment%205/findarea.php'. The form contains three radio button options: 'Triangle' (selected), 'Sqaure', and 'Circle'. To the right of the 'Triangle' option, there are two input fields: 'Base:' with the value '145' and 'Height:' with the value '20'. Below these fields is a green 'Calculate' button. At the bottom of the form, the text 'Area of Triangle: 1450' is displayed.



A screenshot of a web browser window displaying the same 'findarea.php' form. In this instance, the 'Sqaure' radio button is selected. The 'Side:' input field next to it contains the value '25'. The green 'Calculate' button remains visible. Below the button, the text 'Area of Square: 625' is displayed.

☐ Triangle

☐ Sqaure

☒ Circle

Radius:

85

Calculate

Area of Circle: 22698.006922186