

IF120203-Web Programming

07: Server-side Language

PRU/SPMI/FR-BM-18/0222

PRADITA UNIVERSITY



Goals - Using PHP

- To learn about PHP and its role in web development
- To understand how PHP, a server-side scripting language, is used to create dynamic and interactive web applications
- To explore the features of PHP, such as handling form data, working with databases, and creating session management
- To apply PHP code to enhance the functionality and interactivity of web pages, including integrating it with JavaScript and jQuery

Introduction to PHP

- PHP (Hypertext Preprocessor) is a widely used server-side scripting language designed for web development.
- It's embedded within HTML code and executed on the server, generating dynamic content before it's sent to the client's web browser.
- PHP is versatile and can be used for various tasks such as handling form data, interacting with databases, and managing user sessions.
- It's open-source and has a vast community, offering extensive documentation and a wide range of libraries and frameworks.
- PHP code is usually embedded in HTML using special tags, such as '`<?php ... ?>`', making it easy to mix server-side logic with frontend content.

JavaScript converter.js - Using jQuery



- Modify file converter.js
- Function for Reverse Button (Next Pages)
- Function for Convert Button (Next Pages)

JQuery Reverse Button

```
$(document).ready(function () {  
    $("#reverse").click(function () {  
        const fromSelect = $("#from");  
        const toSelect = $("#to");  
        const temp = fromSelect.val();  
        fromSelect.val(toSelect.val());  
        toSelect.val(temp);  
    });  
    // Next is Convert Button
```

JQuery Convert Button - Part 1

```
$("#convert").click(function (e) {  
    e.preventDefault(); // Prevent the form from submitting  
    const fromSelect = $("#from");  
    const toSelect = $("#to");  
    const amount = $("#amount").val();  
    const fromCurrency = fromSelect.val();  
    const toCurrency = toSelect.val();
```

JQuery Convert Button - Part 2

```
$.ajax({  
    url: "converter.php",  
    type: "POST",  
    data: {  
        amount: amount,  
        from: fromCurrency,  
        to: toCurrency,  
    },  
});
```

JQuery Convert Button - Part 3

```
success: function (result) {  
    const rate = result.rate;  
    const convertedAmount = (rate * amount).  
        toLocaleString(undefined, {  
            minimumFractionDigits: 2,  
            maximumFractionDigits: 2,  
        });
```


JQuery Convert Button - Part 4

```
let fromCurrencySymbol;  
    if (fromCurrency === "IDR") {  
        fromCurrencySymbol = "Rp. ";  
    } else if (fromCurrency === "USD") {  
        fromCurrencySymbol = "$ ";  
    } else if (fromCurrency === "EUR") {  
        fromCurrencySymbol = "€ ";  
    } else if (fromCurrency === "GBP") {  
        fromCurrencySymbol = "£ ";  
    }  
}
```

JQuery Convert Button - Part 5

```
let toCurrencySymbol;  
    if (toCurrency === "IDR") {  
        toCurrencySymbol = "Rp. ";  
    } else if (toCurrency === "USD") {  
        toCurrencySymbol = "$ ";  
    } else if (toCurrency === "EUR") {  
        toCurrencySymbol = "€ ";  
    } else if (toCurrency === "GBP") {  
        toCurrencySymbol = "£ ";  
    }  
}
```

JQuery Convert Button - Part 6

```
$("#from-result").text(fromCurrencySymbol + amount);  
    $("#from-currency").text(fromCurrency);  
    $("#to-result").text(toCurrencySymbol +  
        convertedAmount);  
    $("#to-currency").text(toCurrency);  
    $("#exchange-rate").text('1 ${fromCurrency} = ${rate  
        } ${toCurrency}');
```

JQuery Convert Button - Part 7

```
error: function (error) {  
    console.error(error);  
    },  
    });  
});  
});
```

Change HTML to PHP

- change converter.html to converter.php
- adding PHP script on top of the file

Adding PHP Script on Top - Part 1

```
<?php
function convertRate($fromCurrency, $toCurrency)
{
    $apiKey = "
        fca_live_iq1WvbaON67X9adHTaJiqEszDhP6jtDz7louUbWv";
    $url = "https://api.freecurrencyapi.com/v1/latest?apikey=
        $apiKey&currencies=$toCurrency&base_currency=
        $fromCurrency";

    $ch = curl_init($url);
```

Adding PHP Script on Top - Part 2

```
curl_setopt($ch, CURLOPT_RETURNTRANSFER, true);  
$response = curl_exec($ch);  
curl_close($ch);  
$data = json_decode($response, true);  
return $data['data'][$toCurrency];  
}
```

Adding PHP Script on Top - Part 3

```
if ($_SERVER['REQUEST_METHOD'] == 'POST') {  
    $amount = $_POST['amount'];  
    $fromCurrency = $_POST['from'];  
    $toCurrency = $_POST['to'];  
    $rate = convertRate($fromCurrency, $toCurrency);  
}
```


Adding PHP Script on Top - Part 4

```
$response = array(  
    'rate' => $rate  
);  
  
header('Content-Type: application/json');  
echo json_encode($response);  
exit;  
}  
?>
```

Thank You

