

Student's Name

Department, Institutional Affiliation

Course Name and Number

Professor's Name

Due Date

Filtering Data

Task: You are provided with a sizable CSV file link containing data on COVID-19 cases in various counties and states. Your task is to create a PHP script that can efficiently filter and display this data based on user input. The script should also restrict the number of records displayed to a maximum of 1000. Your challenge is to implement a filtering mechanism solely based on states using a search bar.

Instructions:

1. Implement a PHP script that reads and processes the CSV data efficiently.
2. Create a user-friendly interface with a search bar for filtering data based on states.
3. Ensure that the table displays the following columns: Date, County, State, FIPS, Cases, and Deaths.
4. When the user interacts with the search bar and clicks the "Filter" button, the table should update to display the data for the specified state(s)

Submission: Modify this file to add the requested code and provide screenshots of the output. Submit the PHP script file along with any necessary HTML or CSS files.

Code:

display.php

```
<?php
```

```
$csvFile =  
  
'https://raw.githubusercontent.com/nytimes/covid-19-data/master/us-counties-2022.csv';  
  
$filterState = isset($_POST['filterState']) ? $_POST['filterState'] : "";  
  
if (!empty($filterState)) {  
    echo "<b>Filtered by State: " . $filterState . " </b>";  
}  
  
readCSV($csvFile, $filterState, 1000);  
  
>  
  
<script>  
    document.getElementById('filter-button').addEventListener('click', function() {  
        filterTable();  
    });  
    function filterTable() {  
        var input = document.getElementById('search-bar').value;  
        // Submit a form to trigger PHP filtering  
        var form = document.createElement('form');  
        form.method = 'post';  
        form.action = "";  
        var inputField = document.createElement('input');
```

```
    inputField.type = 'hidden';

    inputField.name = 'filterState';

    inputField.value = input;

    form.appendChild(inputField);

    document.body.appendChild(form);

    form.submit();

}
</script>

<?php
function readCSV($csvFile, $filterState, $maxRecords) {

    $file_handle = fopen($csvFile, 'r'); // Get that file

    echo '<br>';

    echo '<table style="float: left;">';

    // Output table headers

    echo '<tr>';

    echo '<th>Date</th>';

    echo '<th>County</th>';

    echo '<th>State</th>';

    echo '<th>FIPS</th>';

    echo '<th>Cases</th>';
```

```
echo '<th>Deaths</th>';

echo '</tr>';

$rowCounter = 0; // Initialize row counter

while (($line = fgetcsv($file_handle, 0, ',')) !== false) {

    // Check if the line has enough columns (at least 6)

    if (count($line) >= 6) {

        // Check if the state matches the filter or if no filter is being applied

        if (empty($filterState) || strtoupper($line[2]) === strtoupper($filterState)) {

            echo '<tr>';

            // Output data for each column

            foreach ($line as $cell) {

                echo '<td>' . $cell . '</td>';

            }

            echo '</tr>';

        }

        $rowCounter++;

    }

    if ($rowCounter >= $maxRecords) {

        break; // Stop after displaying 1000 rows

    }

}
```

```
    }  
  }  
}  
  
fclose($file_handle);  
  
echo '</table>';  
}  
?>
```

Index.php

```
<!DOCTYPE html>  
  
<html>  
  
<head>  
  
  <title>COVID-19 Data</title>  
  
  <style>  
  
    /* Center-align the content and style the search bar */  
  
    body {  
  
      text-align: center;  
  
    }  
  
  }  
  
</head>  
  
</html>
```

```
#search-bar {  
    width: 300px;  
    padding: 5px;  
    font-size: 16px;  
}  
  
#filter-button {  
    padding: 5px 10px;  
    font-size: 16px;  
}  
  
table {  
    float: left;  
    margin: 0 auto;  
    border: 1px solid black;  
    border-collapse: collapse;  
    width: 100%;  
}  
  
th, td {  
    border: 1px solid black;  
    padding: 8px;  
    text-align: left;  
}
```

```
    th {  
        background-color: #f2f2f2;  
    }  
</style>  
</head>  
<body>  
    <h1>COVID-19 Data</h1>  
  
    <!-- Search bar and filter button -->  
    <input type="text" id="search-bar" placeholder="Enter State Name">  
    <button id="filter-button">Filter</button>  
  
<br><br>  
    <!-- Display the table using PHP -->  
    <?php  
    include 'display.php';  
    ?>  
</body>  
</html>
```

Output:

COVID-19 Data

| Date | County | State | FIPS | Cases | Deaths |
|------------|----------|---------|-------|-------|--------|
| 2022-01-01 | Autauga | Alabama | 01001 | 11018 | 160 |
| 2022-01-01 | Baldwin | Alabama | 01003 | 39911 | 593 |
| 2022-01-01 | Barbour | Alabama | 01005 | 3860 | 81 |
| 2022-01-01 | Bibb | Alabama | 01007 | 4533 | 95 |
| 2022-01-01 | Blount | Alabama | 01009 | 11256 | 198 |
| 2022-01-01 | Bullock | Alabama | 01011 | 1676 | 46 |
| 2022-01-01 | Butler | Alabama | 01013 | 3613 | 102 |
| 2022-01-01 | Calhoun | Alabama | 01015 | 23411 | 532 |
| 2022-01-01 | Chambers | Alabama | 01017 | 6171 | 147 |
| 2022-01-01 | Cherokee | Alabama | 01019 | 3385 | 65 |
| 2022-01-01 | Chilton | Alabama | 01021 | 7424 | 173 |
| 2022-01-01 | Choctaw | Alabama | 01023 | 1026 | 30 |
| 2022-01-01 | Clarke | Alabama | 01025 | 4944 | 88 |

Filtered by state (Florida)

COVID-19 Data

Filtered by State: Florida

| Date | County | State | FIPS | Cases | Deaths |
|------------|-----------|---------|-------|--------|--------|
| 2022-01-01 | Alachua | Florida | 12001 | 43279 | 539 |
| 2022-01-01 | Baker | Florida | 12003 | 6152 | 122 |
| 2022-01-01 | Bay | Florida | 12005 | 32985 | 704 |
| 2022-01-01 | Bradford | Florida | 12007 | 5490 | 128 |
| 2022-01-01 | Brevard | Florida | 12009 | 88645 | 1784 |
| 2022-01-01 | Broward | Florida | 12011 | 439975 | 4978 |
| 2022-01-01 | Calhoun | Florida | 12013 | 3088 | 85 |
| 2022-01-01 | Charlotte | Florida | 12015 | 24777 | 676 |
| 2022-01-01 | Citrus | Florida | 12017 | 21313 | 839 |
| 2022-01-01 | Clay | Florida | 12019 | 35827 | 703 |
| 2022-01-01 | Collier | Florida | 12021 | 62065 | 884 |
| 2022-01-01 | Columbia | Florida | 12023 | 15424 | 320 |
| 2022-01-01 | DeSoto | Florida | 12027 | 7077 | 138 |

Filtered by state (California)

COVID-19 Data

Enter State Name

Filtered by State: California

| Date | County | State | FIPS | Cases | Deaths |
|------------|--------------|------------|-------|--------|--------|
| 2022-01-01 | Alameda | California | 06001 | 137131 | 1544 |
| 2022-01-01 | Alpine | California | 06003 | 113 | 0 |
| 2022-01-01 | Amador | California | 06005 | 5991 | 70 |
| 2022-01-01 | Butte | California | 06007 | 26607 | 341 |
| 2022-01-01 | Calaveras | California | 06009 | 4738 | 93 |
| 2022-01-01 | Colusa | California | 06011 | 3376 | 21 |
| 2022-01-01 | Contra Costa | California | 06013 | 112315 | 1073 |
| 2022-01-01 | Del Norte | California | 06015 | 3963 | 43 |
| 2022-01-01 | El Dorado | California | 06017 | 19556 | 172 |
| 2022-01-01 | Fresno | California | 06019 | 163067 | 2379 |
| 2022-01-01 | Glenn | California | 06021 | 4725 | 54 |
| 2022-01-01 | Humboldt | California | 06023 | 11197 | 122 |
| 2022-01-01 | Imperial | California | 06025 | 42076 | 799 |