Bootstrap Server Select - Usage Guide

A powerful, flexible select component with server-side search for Bootstrap 5.

📦 Installation

1. Download Files

Save these files to your project:

- `bootstrap-server-select.css`
- `bootstrap-server-select.js`

2. Include Dependencies

```html
<!-- Bootstrap 5 CSS -->
<link href="https://cdnjs.cloudflare.com/ajax/libs/bootstrap/5.3.0/css/bootstrap.min.css" rel="
<!-- Bootstrap Icons -->
<link href="https://cdnjs.cloudflare.com/ajax/libs/bootstrap-icons/1.10.0/font/bootstrap-icons.
<!-- Bootstrap Server Select CSS -->
<link href="path/to/bootstrap-server-select.css" rel="stylesheet">
```

3. Include Scripts

```html
<!-- jQuery (required) -->
<script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.7.0/jquery.min.js"></script>
<!-- Bootstrap 5 JS -->
<script src="https://cdnjs.cloudflare.com/ajax/libs/bootstrap/5.3.0/js/bootstrap.bundle.min.js"
<!-- Bootstrap Server Select JS -->
<script src="path/to/bootstrap-server-select.js"></script>
```

🚀 Quick Start

HTML Structure

```html
html

<div class="mb-3">
    <label for="userSelect" class="form-label">Select User</label>
    <input type="text" class="form-control" id="userSelect" name="user" placeholder="Search for
</div>
```

JavaScript Initialization

```javascript
javascript

$(document).ready(function() {
    $('#userSelect').bootstrapServerSelect({
        apiUrl: '/api/users/search',
        minLength: 2,
        debounceDelay: 300
    });
});
```

🔧 Configuration Options

Option	Type	Default	Description
apiUrl	string	'/api/search'	Server endpoint URL
method	string	'GET'	HTTP method
minLength	number	2	Minimum characters before search
debounceDelay	number	300	Delay in milliseconds
paramName	string	'q'	Query parameter name
displayKey	string	'name'	Object property for display text
valueKey	string	'id'	Object property for value
subtitleKey	string	null	Object property for subtitle
placeholder	string	'Search...'	Input placeholder
loadingText	string	'Searching...'	Loading message
noResultsText	string	'No results found'	No results message
errorText	string	'Failed to fetch results'	Error message
maxResults	number	10	Maximum results to show
cache	boolean	true	Enable result caching
autoSelectFirst	boolean	false	Auto-select first result

🌐 Server-Side Implementation

Expected Request

```
GET /api/users/search?q=john
```

Expected Response Format

```json
[
    {
        "id": 1,
        "name": "John Doe",
        "email": "john@example.com"
    },
    {
        "id": 2,
        "name": "John Smith",
        "email": "john.smith@example.com"
    }
]
```

Example PHP Implementation

php

```php
<?php
// api/users/search.php
header('Content-Type: application/json');

$query = $_GET['q'] ?? '';
$query = trim($query);

if (strlen($query) < 2) {
    echo json_encode([]);
    exit;
}

// Database query (example with PDO)
$pdo = new PDO($dsn, $username, $password);
$stmt = $pdo->prepare("
    SELECT id, name, email
    FROM users
    WHERE name LIKE ? OR email LIKE ?
    LIMIT 10
");
$searchTerm = "%{$query}%";
$stmt->execute([$searchTerm, $searchTerm]);

$results = $stmt->fetchAll(PDO::FETCH_ASSOC);
echo json_encode($results);
?>
```

Example Node.js/Express Implementation

```javascript
app.get('/api/users/search', async (req, res) => {
    try {
        const query = req.query.q || '';

        if (query.length < 2) {
            return res.json([]);
        }

        const users = await User.find({
            $or: [
                { name: { $regex: query, $options: 'i' } },
                { email: { $regex: query, $options: 'i' } }
            ]
        }).limit(10);

        res.json(users);
    } catch (error) {
        res.status(500).json({ error: 'Search failed' });
    }
});
```

💡 Usage Examples

Basic Usage

```javascript
$('#userSelect').bootstrapServerSelect({
    apiUrl: '/api/users/search'
});
```

Advanced Configuration

```javascript
$('#userSelect').bootstrapServerSelect({
    apiUrl: '/api/users/search',
    minLength: 1,
    debounceDelay: 500,
    displayKey: 'full_name',
    valueKey: 'user_id',
    subtitleKey: 'email',
    maxResults: 20,
    headers: {
        'Authorization': 'Bearer ' + token
    },
    onSelect: function(value, text, item) {
        console.log('Selected:', value, text);
    }
});
```

Auto-initialization with Data Attributes

```html
<input type="text"
       class="form-control"
       data-toggle="server-select"
       data-api-url="/api/users/search"
       data-min-length="1"
       data-display-key="full_name"
       placeholder="Search users...">
```

Custom Template

```javascript
$('#userSelect').bootstrapServerSelect({
    apiUrl: '/api/users/search',
    template: function(item, index) {
        return `
            <div class="bs-server-select-item" data-value="${item.id}" data-text="${item.name}"
                <div class="d-flex align-items-center">
                    <img src="${item.avatar}" class="rounded-circle me-2" width="32" height="32
                    <div>
                        <div class="fw-semibold">${item.name}</div>
                        <small class="text-muted">${item.email}</small>
                    </div>
                </div>
            </div>
        `;
    }
});
```

📋 Methods

setValue(value, text)

Set the selected value and display text:

```javascript
$('#userSelect').bootstrapServerSelect('setValue', 123, 'John Doe');
```

clear()

Clear the selection:

```javascript
$('#userSelect').bootstrapServerSelect('clear');
```

refresh()

Clear cache and refresh results:

```javascript
$('#userSelect').bootstrapServerSelect('refresh');
```

destroy()

Destroy the component:

```javascript
$('#userSelect').bootstrapServerSelect('destroy');
```

🎯 Events

Listen to Events

```javascript
$('#userSelect')
    .on('bss:select', function(e, value, text, item) {
        console.log('Item selected:', value, text);
    })
    .on('bss:clear', function(e) {
        console.log('Selection cleared');
    })
    .on('bss:open', function(e) {
        console.log('Dropdown opened');
    })
    .on('bss:close', function(e) {
        console.log('Dropdown closed');
    })
    .on('bss:loaded', function(e, results, query) {
        console.log('Results loaded:', results.length);
    })
    .on('bss:error', function(e, xhr, status, error) {
        console.log('Search error:', error);
    });
```

🎨 Styling

Size Variants

```html
<!-- Small -->
<input type="text" class="form-control form-control-sm" id="smallSelect">

<!-- Default -->
<input type="text" class="form-control" id="defaultSelect">

<!-- Large -->
<input type="text" class="form-control form-control-lg" id="largeSelect">
```

Custom CSS

```css
/* Custom dropdown styling */
.bs-server-select-dropdown {
    border-radius: 10px;
    box-shadow: 0 4px 6px rgba(0, 0, 0, 0.1);
}

/* Custom item styling */
.bs-server-select-item:hover {
    background-color: #f0f8ff;
}
```

🔍 Form Integration

Getting Values

```javascript
// Get display text
const displayText = $('#userSelect').val();

// Get actual value (from hidden input)
const actualValue = $('#userSelect').siblings('input[type="hidden"]').val();
```

Form Submission

```html
html

<form id="myForm">
    <input type="text" class="form-control" name="user" id="userSelect">
    <button type="submit">Submit</button>
</form>

<script>
$('#myForm').on('submit', function(e) {
    const selectedValue = $('#userSelect').siblings('input[type="hidden"]').val();

    if (!selectedValue) {
        alert('Please select a user');
        e.preventDefault();
        return false;
    }

    // Form will submit with the hidden input value
});
</script>
```

🐛 Troubleshooting

Common Issues

1. **No results showing**: Check your API endpoint and response format

2. **Search not triggering**: Verify `minLength` setting

3. **Styling issues**: Ensure Bootstrap 5 CSS is loaded

4. **JavaScript errors**: Check jQuery and Bootstrap JS are loaded

Debug Mode

```javascript
javascript

$('#userSelect').bootstrapServerSelect({
    apiUrl: '/api/users/search',
    beforeSend: function(ajaxOptions, query) {
        console.log('Searching for:', query);
        console.log('AJAX options:', ajaxOptions);
    }
});
```

📱 Browser Support

- Chrome 60+

- Firefox 55+
- Safari 12+
- Edge 79+
- IE 11 (with polyfills)

🤝 Contributing

Issues and pull requests are welcome! Please ensure your code follows the existing style and includes appropriate tests.

📄 License

MIT License - feel free to use in personal and commercial projects.