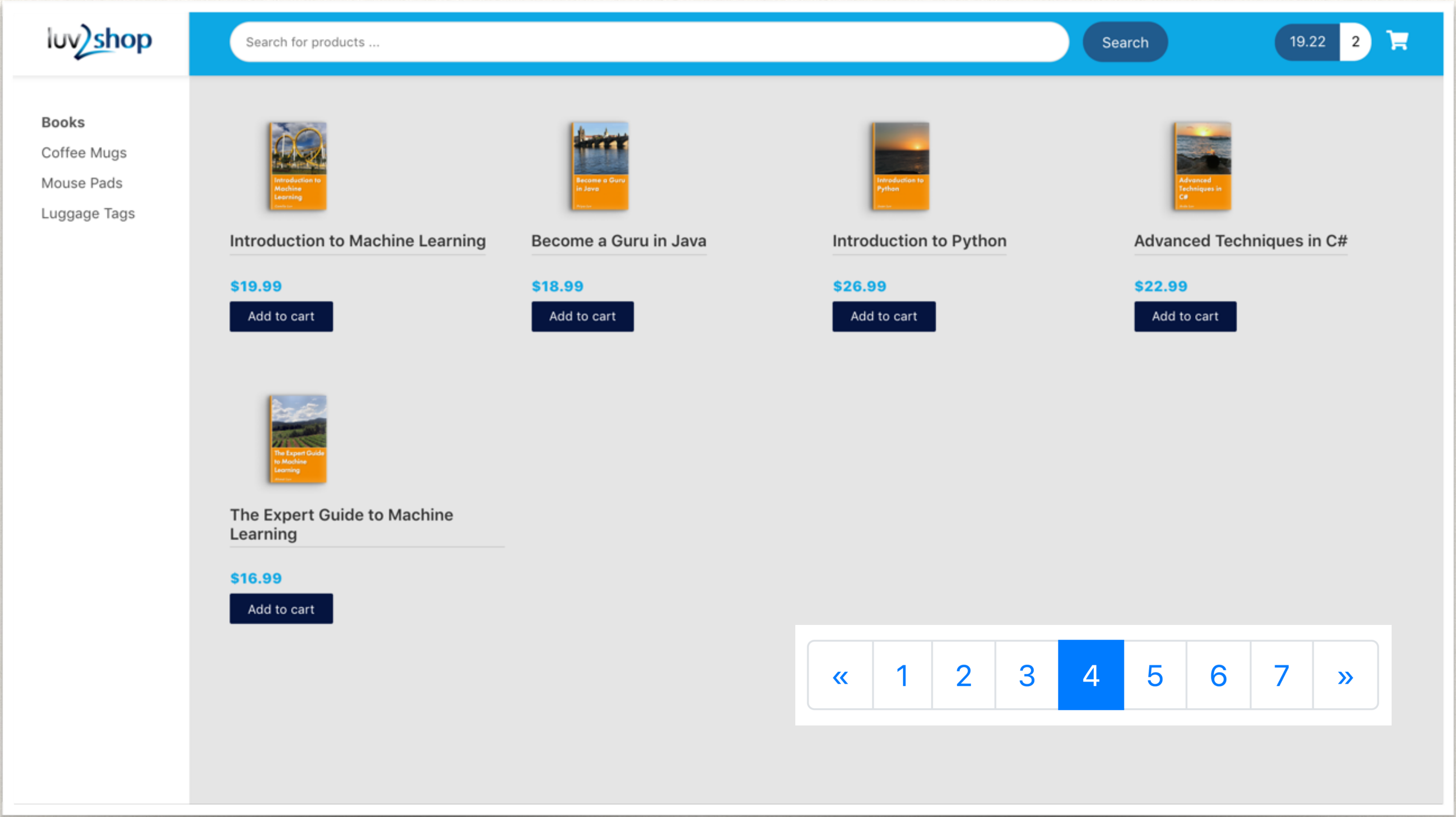


## Step 5: Enhance HTML template to use ng-bootstrap pagination component

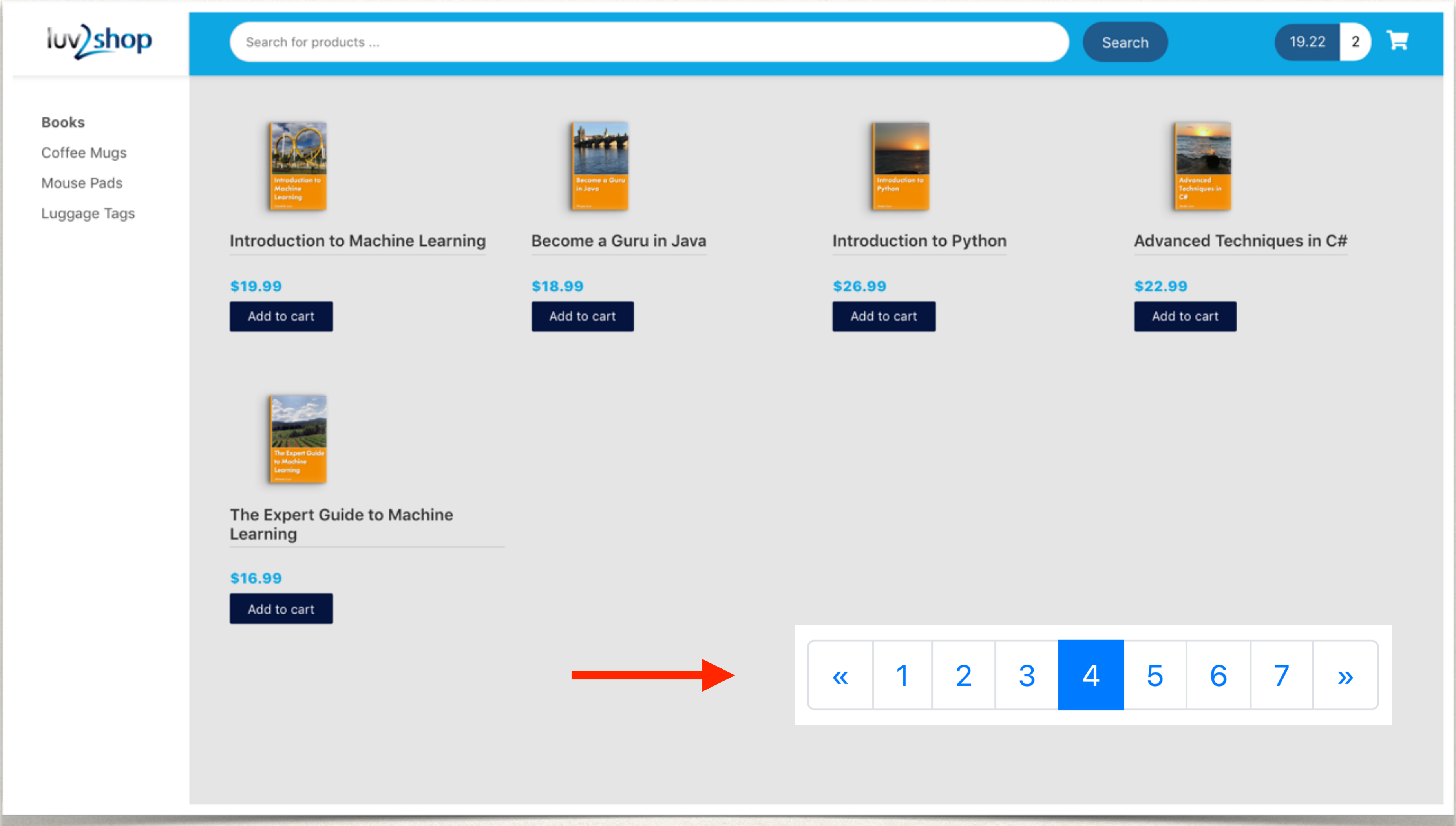


# Step 5: Enhance HTML template to use ng-bootstrap pagination component



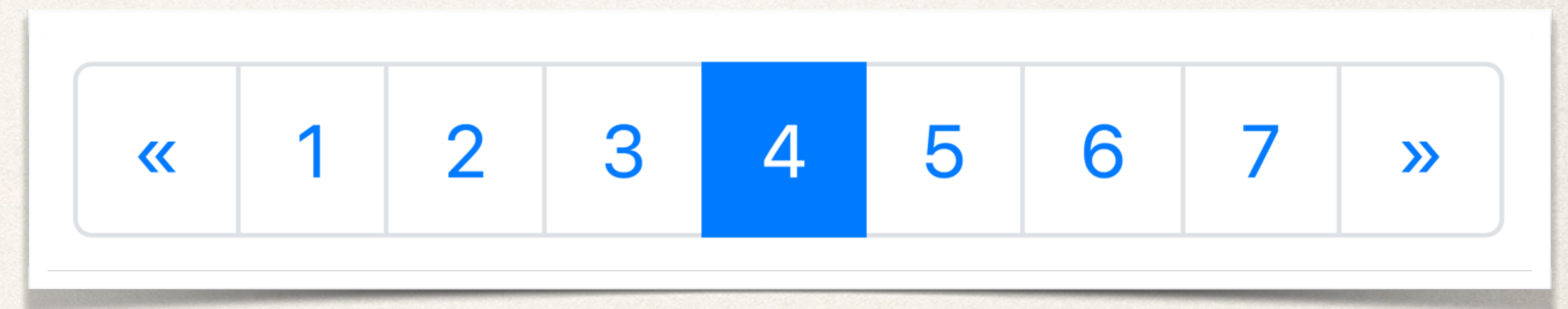


# Step 5: Enhance HTML template to use ng-bootstrap pagination component





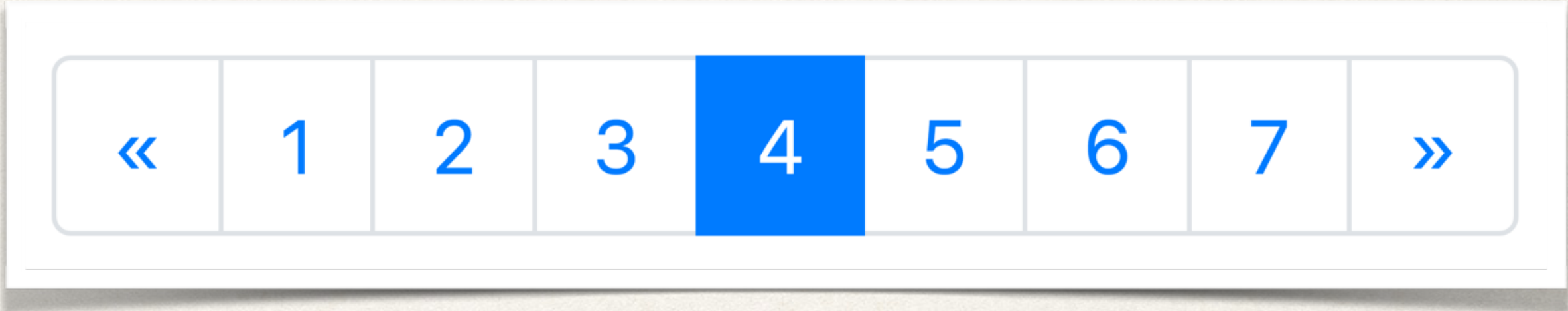
## Step 5: Enhance HTML template to use ng-bootstrap pagination component





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

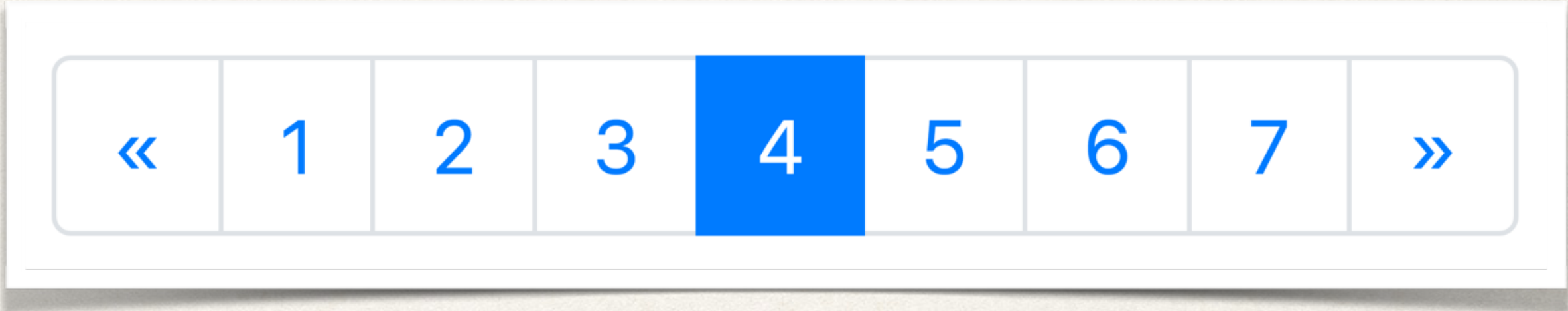
Parameter	Purpose





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

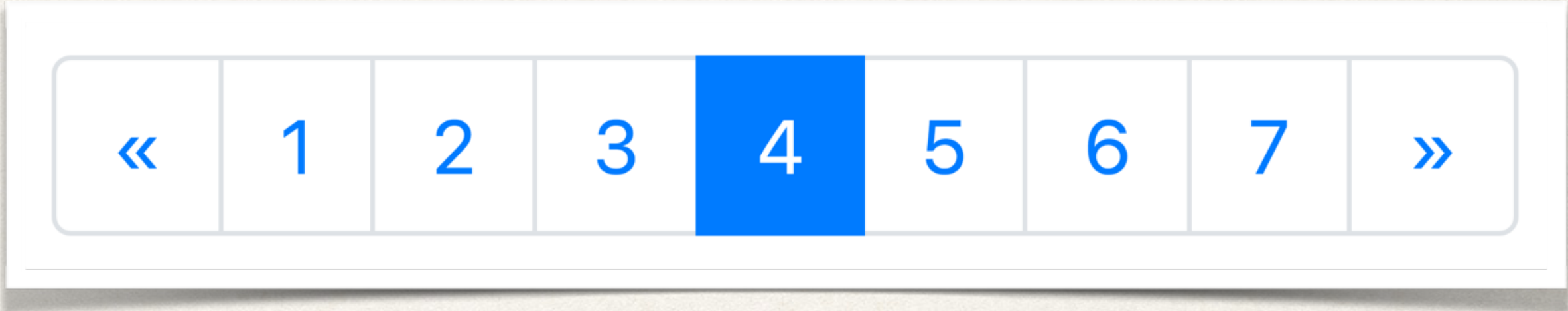
Parameter	Purpose
<code>page</code>	The page number to access. 1-based ... defaults to 1





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

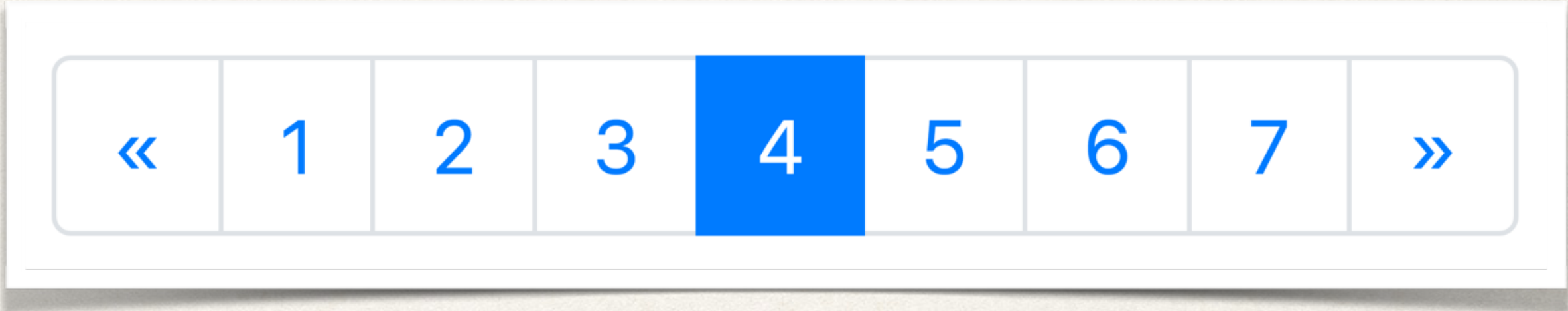
Parameter	Purpose
<code>page</code>	The page number to access. 1-based ... defaults to 1
<code>pageSize</code>	The size of the page (items per page). Defaults to 10





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

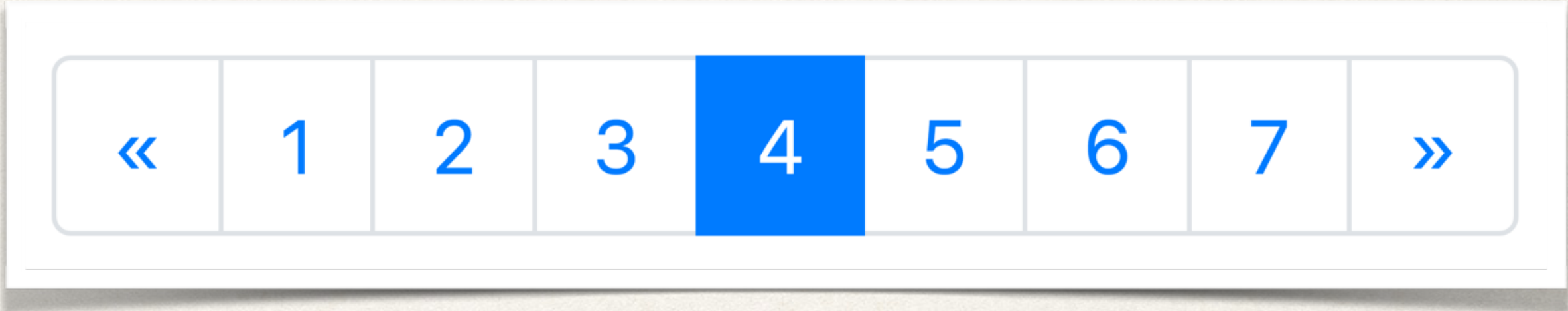
Parameter	Purpose
page	The page number to access. 1-based ... defaults to 1
pageSize	The size of the page (items per page). Defaults to 10
collectionSize	The total number of items





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

Parameter	Purpose
<code>page</code>	The page number to access. 1-based ... defaults to 1
<code>pageSize</code>	The size of the page (items per page). Defaults to 10
<code>collectionSize</code>	The total number of items
<code>pageChange</code>	Event handler for page change events

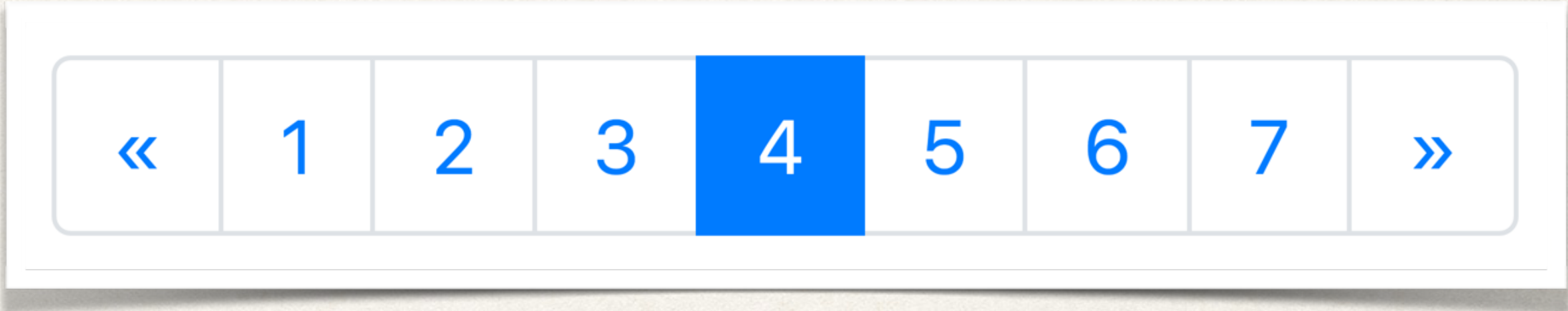




# Step 5: Enhance HTML template to use ng-bootstrap pagination component

Parameter	Purpose
<code>page</code>	The page number to access. 1-based ... defaults to 1
<code>pageSize</code>	The size of the page (items per page). Defaults to 10
<code>collectionSize</code>	The total number of items
<code>pageChange</code>	Event handler for page change events

<https://ng-bootstrap.github.io/>





## Step 5: Enhance HTML template to use ng-bootstrap pagination component



# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html


```
<div class="footer-pagination">
...
  <ngb-pagination [(page)]="thePageNumber"
                  [pageSize]="thePageSize"
                  [collectionSize]="theTotalElements"
                  (pageChange)="listProducts()">
  </ngb-pagination>
...
</div>
```



# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

```
<div class="footer-pagination">
...
  <ngb-pagination [(page)]= "thePageNumber"
                  [pageSize]= "thePageSize"
                  [collectionSize]= "theTotalElements"
                  (pageChange)= "listProducts()" >
    </ngb-pagination>
...
</div>
```



Component will generate  
links for pagination

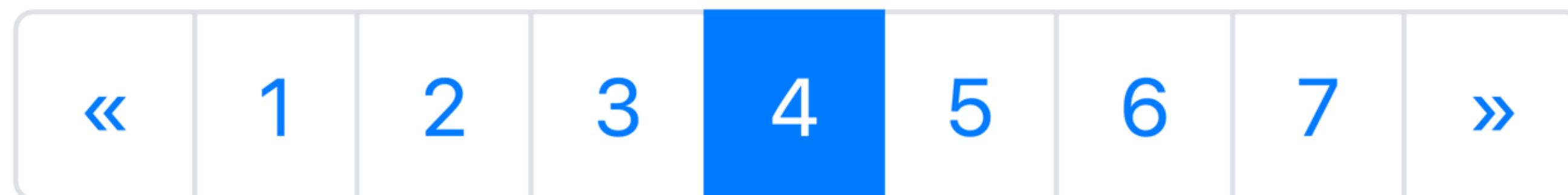


# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

```
<div class="footer-pagination">
...
  <ngb-pagination [(page)]= "thePageNumber"
                  [pageSize]= "thePageSize"
                  [collectionSize]= "theTotalElements"
                  (pageChange)= "listProducts()" >
    </ngb-pagination>
...
</div>
```

Component will generate  
links for pagination

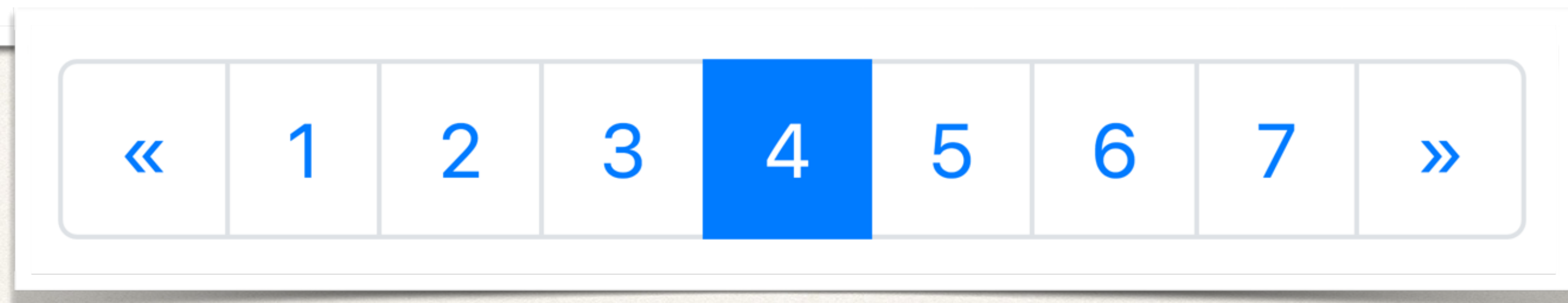
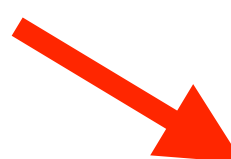




# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

```
<div class="footer-pagination">  
...  
  <ngb-pagination [(page)]="thePageNumber"  
  
  </ngb-pagination>  
...  
</div>
```





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

Special Angular syntax for  
Two-Way Data Binding

File: product-list-grid.component.html

```
<div class="footer-pagination">  
...  
  <ngb-pagination [(page)]="thePageNumber"  
  
  </ngb-pagination>  
...  
</div>
```





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

Special Angular syntax for  
Two-Way Data Binding

File: product-list-grid.component.html

```
<div class="footer-pagination">  
...  
  <ngb-pagination [(page)]="thePageNumber"  
  
  </ngb-pagination>  
...  
</div>
```

known as "banana in a box"



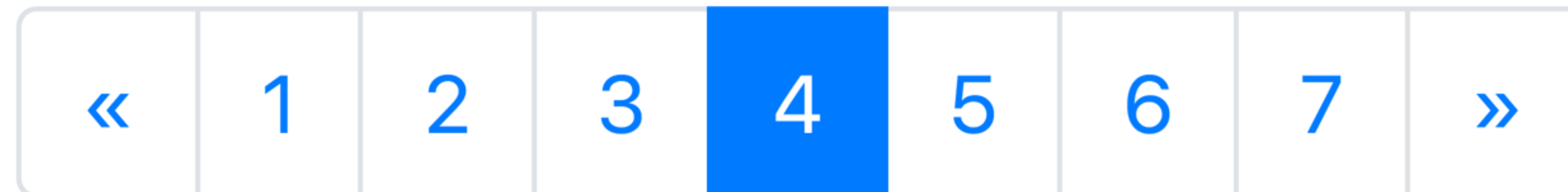


# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

```
<div class="footer-pagination">
...
  <ngb-pagination [(page)]="thePageNumber"

  </ngb-pagination>
...
</div>
```





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

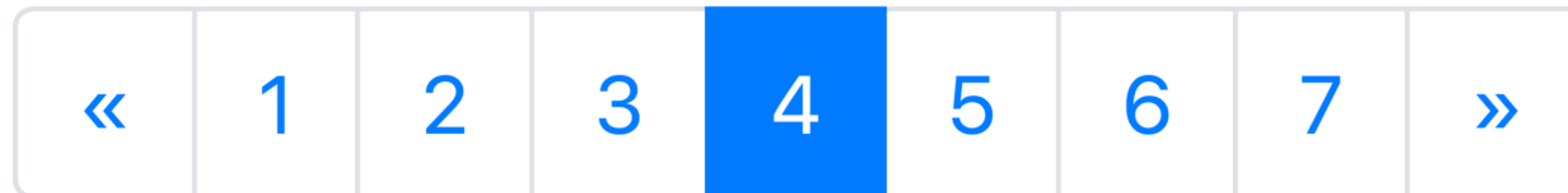
```
<div class="footer-pagination">
  ...
  <ngb-pagination [(page)]="thePageNumber"

  </ngb-pagination>
  ...
</div>
```

File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  // new properties for pagination
  thePageNumber: number;
  thePageSize: number;
  theTotalElements: number;
  ...
}
```





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

## Two-Way Data Binding

File: product-list-grid.component.html

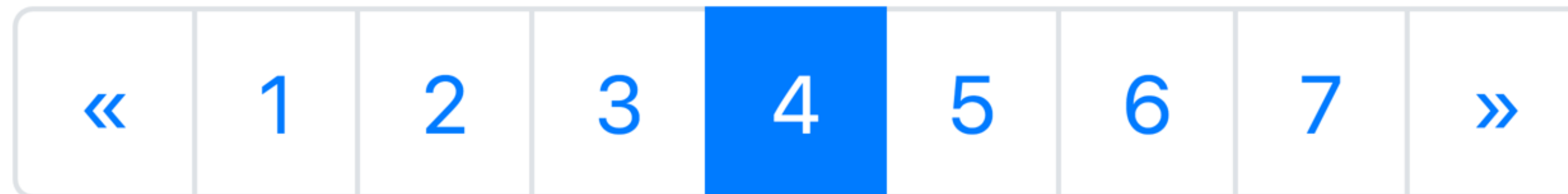
```
<div class="footer-pagination">
  ...
  <ngb-pagination [(page)]="thePageNumber"

  </ngb-pagination>
  ...
</div>
```

File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  // new properties for pagination
  thePageNumber: number;
  thePageSize: number;
  theTotalElements: number;
  ...
}
```





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

## Two-Way Data Binding

File: product-list-grid.component.html

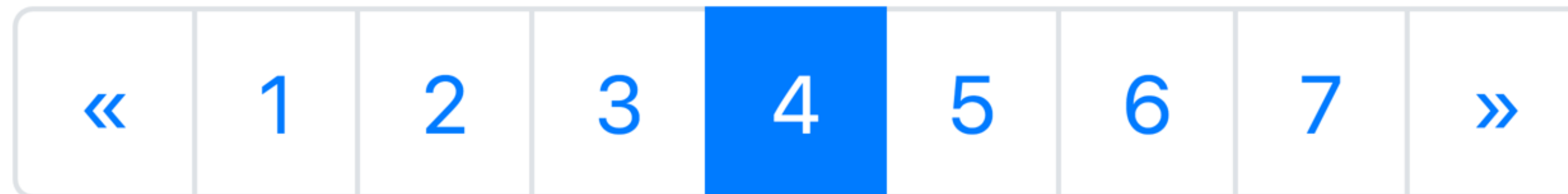
```
<div class="footer-pagination">
  ...
  <ngb-pagination [(page)]="thePageNumber"

  </ngb-pagination>
  ...
</div>
```

File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  // new properties for pagination
  thePageNumber: number;
  thePageSize: number;
  theTotalElements: number;
  ...
}
```





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

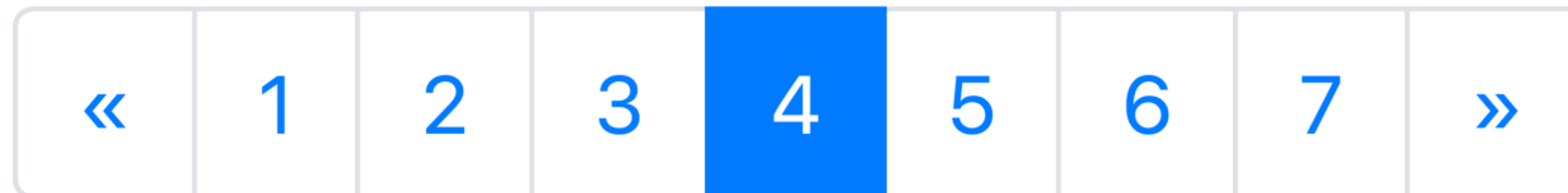
```
<div class="footer-pagination">
...
  <ngb-pagination [(page)]="thePageNumber"

  </ngb-pagination>
...
</div>
```

File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  // new properties for pagination
  thePageNumber: number;
  thePageSize: number;
  theTotalElements: number;
  ...
}
```





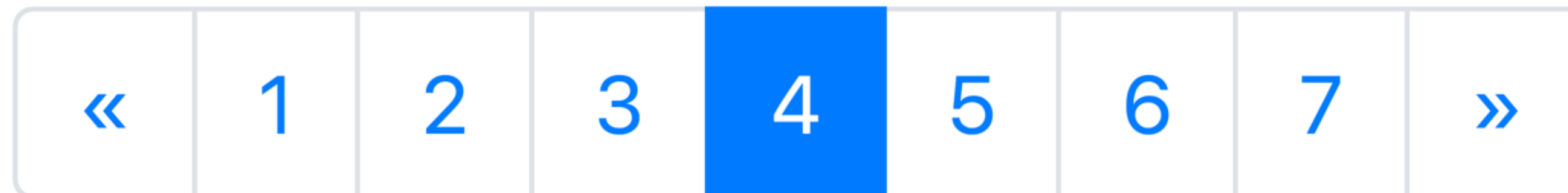
# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

```
<div class="footer-pagination">
...
  <ngb-pagination [(page)]="thePageNumber"

  </ngb-pagination>
...
</div>
```

When user clicks a  
"page" navigation link



File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  // new properties for pagination
  thePageNumber: number;
  thePageSize: number;
  theTotalElements: number;
  ...
}
```



# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

```
<div class="footer-pagination">
...
  <ngb-pagination [(page)]="thePageNumber"

...
</ngb-pagination>
...
</div>
```

When user clicks a  
"page" navigation link



File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  // new properties for pagination
  thePageNumber: number;
  thePageSize: number;
  theTotalElements: number;
  ...
}
```

In our TypeScript component  
"thePageNumber" property is  
updated based on user action



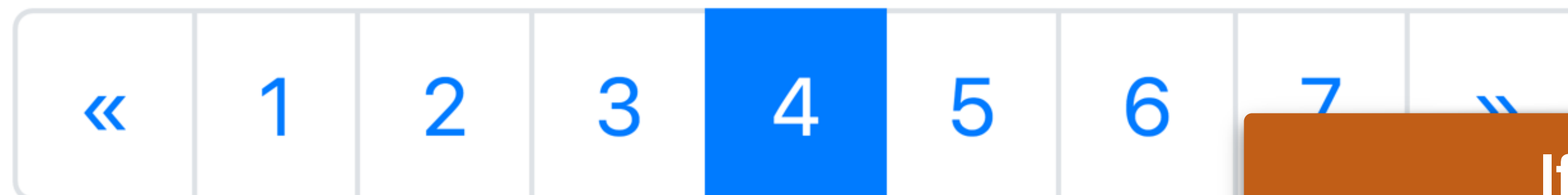
# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

```
<div class="footer-pagination">
...
<ngb-pagination [(page)]="thePageNumber"

</ngb-pagination>
...
</div>
```

When user clicks a  
"page" navigation link



File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  // new properties for pagination
  thePageNumber: number;
  thePageSize: number;
  theTotalElements: number;
  ...
}
```

In our TypeScript component  
"thePageNumber" property is  
updated based on user action

If user clicks 4,  
then "thePageNumber" is set to 4



# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

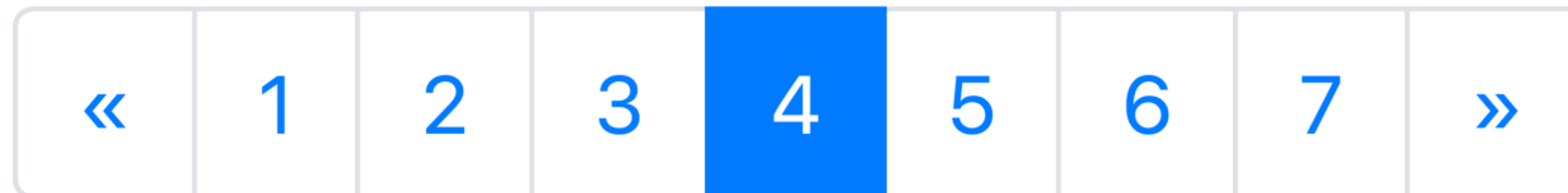
```
<div class="footer-pagination">
  ...
  <ngb-pagination [(page)]="thePageNumber"

  </ngb-pagination>
  ...
</div>
```

File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  // new properties for pagination
  thePageNumber: number;
  thePageSize: number;
  theTotalElements: number;
  ...
}
```





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

```
<div class="footer-pagination">
  ...
  <ngb-pagination [(page)]="thePageNumber"

  </ngb-pagination>
  ...
</div>
```

File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  // new properties for pagination
  thePageNumber: number;
  thePageSize: number;
  theTotalElements: number;
  ...
}
```



If our TypeScript code updates "thePageNumber" then UI component is updated automatically

Current page number is highlighted



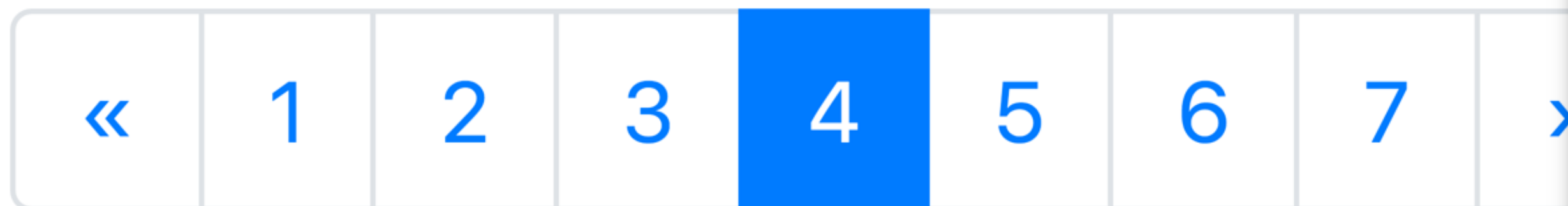
# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

```
<div class="footer-pagination">
  ...
  <ngb-pagination [(page)]="thePageNumber"

  </ngb-pagination>
  ...
</div>
```

Current page number



File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  // new properties for pagination
  thePageNumber: number;
  thePageSize: number;
  theTotalElements: number;
  ...
}
```

If our TypeScript code updates "thePageNumber" then UI component is updated automatically

Current page number is highlighted



# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

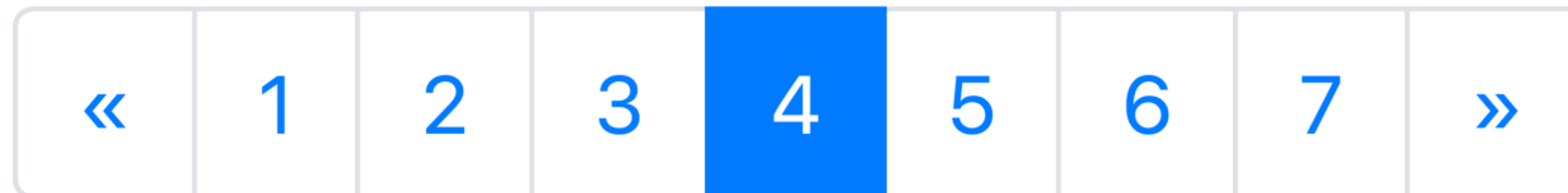
```
<div class="footer-pagination">
  ...
  <ngb-pagination [(page)]="thePageNumber"
                  [pageSize]="thePageSize"

  </ngb-pagination>
  ...
</div>
```

File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  // new properties for pagination
  thePageNumber: number;
  thePageSize: number;
  theTotalElements: number;
  ...
}
```





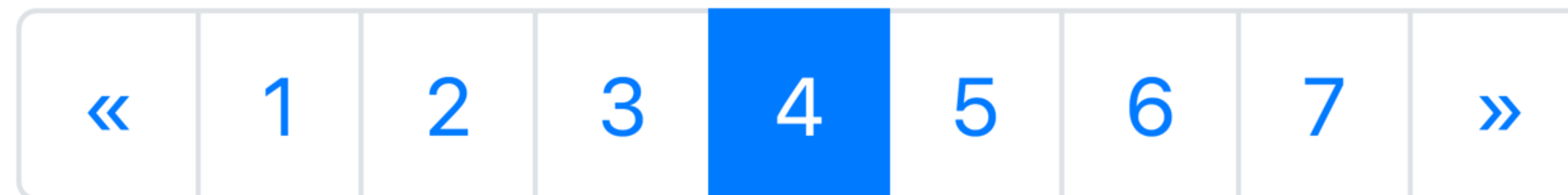
# Step 5: Enhance HTML template to use ng-bootstrap pagination component

Special Angular syntax for  
One-Way Data Binding

```
...  
<ngb-pagination [(page)]="thePageNumber"  
                 [pageSize]="thePageSize"  
  
</ngb-pagination>  
...  
</div>
```

File: product-list.component.ts

```
export class ProductListComponent implements OnInit {  
  
    // new properties for pagination  
    thePageNumber: number;  
    thePageSize: number;  
    theTotalElements: number;  
    ...  
}
```





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

Special Angular syntax for  
One-Way Data Binding

```
...  
<ngb-pagination [(page)]="thePageNumber"  
                 [pageSize]="thePageSize"  
  
</ngb-pagination>  
...  
</div>
```

File: product-list.component.ts

```
export class ProductListComponent implements OnInit {  
  
    // new properties for pagination  
    thePageNumber: number;  
    thePageSize: number;  
    theTotalElements: number;  
    ...  
}
```

If our TypeScript code  
updates "thePageSize"  
then UI component is updated  
automatically





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

Special Angular syntax for  
One-Way Data Binding

```
...  
<ngb-pagination [(page)]="thePageNumber"  
                 [pageSize]="thePageSize"  
...  
</ngb-pagination>  
...  
</div>
```

File: product-list.component.ts

```
export class ProductListComponent implements OnInit {  
  
    // new properties for pagination  
    thePageNumber: number;  
    thePageSize: number;  
    theTotalElements: number;  
    ...  
}
```

If our TypeScript code  
updates "thePageSize"  
then UI component is updated  
automatically





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

Special Angular syntax for  
One-Way Data Binding

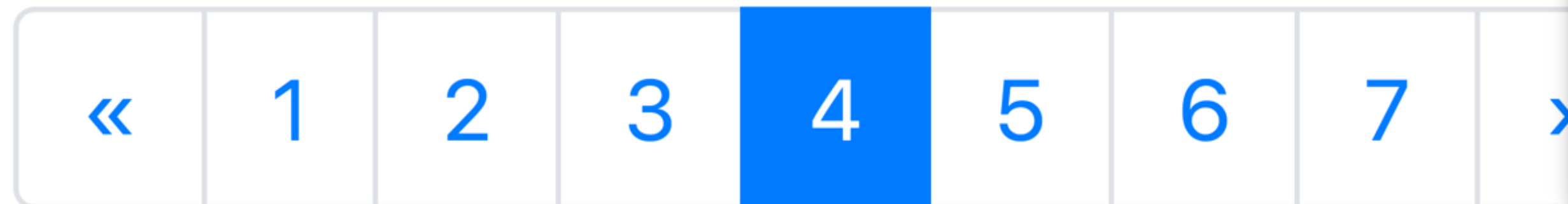
One-Way Data Binding

```
...  
<ngb-pagination [(page)]="thePageNumber"  
                 [pageSize]="thePageSize"  
...  
</ngb-pagination>  
...  
</div>
```

File: product-list.component.ts

```
export class ProductListComponent implements OnInit {  
  
    // new properties for pagination  
    thePageNumber: number;  
    thePageSize: number;  
    theTotalElements: number;  
    ...  
}
```

If our TypeScript code  
updates "thePageSize"  
then UI component is updated  
automatically





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

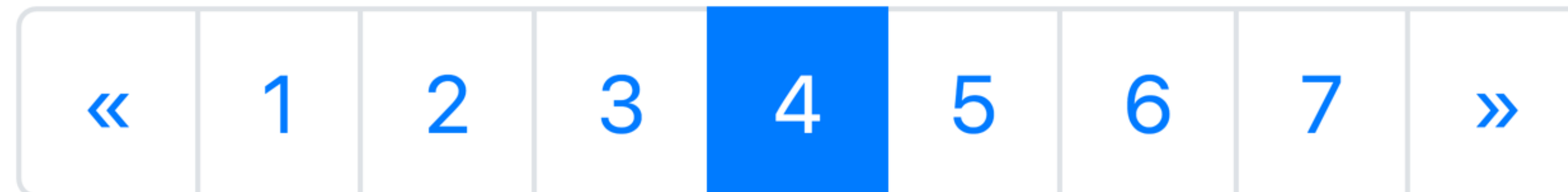
```
<div class="footer-pagination">
  ...
  <ngb-pagination [(page)]= "thePageNumber"
                  [pageSize]= "thePageSize"
                  [collectionSize]= "theTotalElements"

  </ngb-pagination>
  ...
</div>
```

File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  // new properties for pagination
  thePageNumber: number;
  thePageSize: number;
  theTotalElements: number;
  ...
}
```





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

```
<div class="footer-pagination">
  ...
  <ngb-pagination [(page)]= "thePageNumber"
                  [pageSize]= "thePageSize"
                  [collectionSize]= "theTotalElements"

  </ngb-pagination>
  ...
</div>
```

File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  // new properties for pagination
  thePageNumber: number;
  thePageSize: number;
  theTotalElements: number;
  ...
}
```

If our TypeScript code updates "theTotalElements" then UI component is updated automatically





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

```
<div class="footer-pagination">
  ...
  <ngb-pagination [(page)]= "thePageNumber"
                  [pageSize]= "thePageSize"
                  [collectionSize]= "theTotalElements"

  </ngb-pagination>
  ...
</div>
```

File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  // new properties for pagination
  thePageNumber: number;
  thePageSize: number;
  theTotalElements: number;
  ...
}
```



If our TypeScript code updates "theTotalElements" then UI component is updated automatically



# Step 5: Enhance HTML template to use ng-bootstrap pagination component

## One-Way Data Binding

File: product-list-grid.component.html

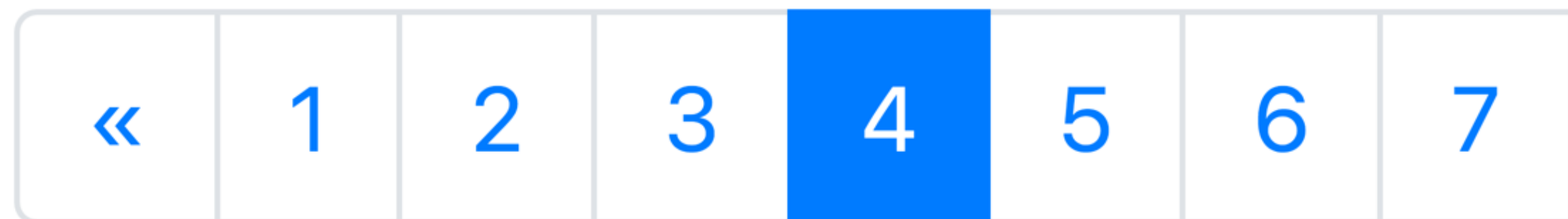
```
<div class="footer-pagination">
  ...
  <ngb-pagination [(page)]= "thePageNumber"
                  [pageSize]= "thePageSize"
                  [collectionSize]= "theTotalElements"
  </ngb-pagination>
  ...
</div>
```

File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  // new properties for pagination
  thePageNumber: number;
  thePageSize: number;
  theTotalElements: number;
  ...
}
```

If our TypeScript code updates "theTotalElements" then UI component is updated automatically





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

```
<div class="footer-pagination">
  ...
  <ngb-pagination [(page)]="thePageNumber"
                  [pageSize]="thePageSize"
                  [collectionSize]="theTotalElements"
                  (pageChange)="listProducts()">
  </ngb-pagination>
  ...
</div>
```

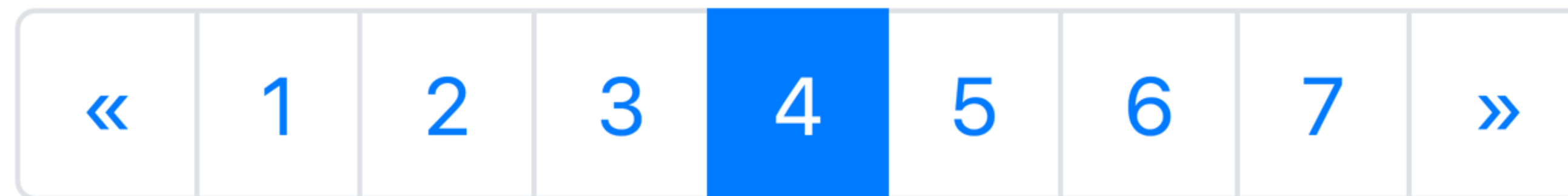
File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  listProducts() {

    this.searchMode = ...;

    if (this.searchMode) {
      this.handleSearchProducts();
    }
    else {
      this.handleListProducts();
    }
  }
}
```



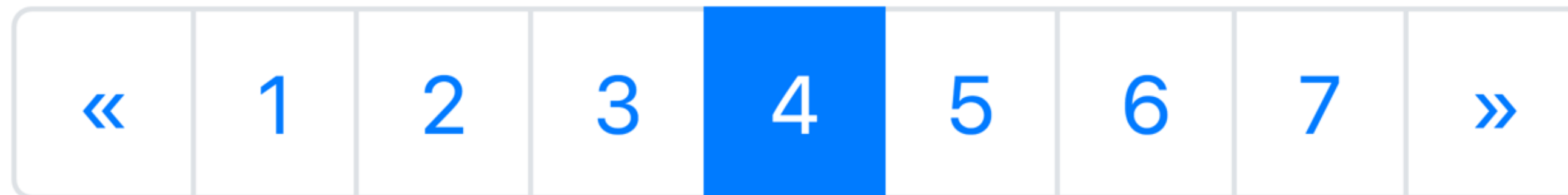


# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

```
<div class="footer-pagination">
...
  <ngb-pagination [(page)]="thePageNumber"
                  [pageSize]="thePageSize"
                  [collectionSize]="theTotalElements"
                  (pageChange)="listProducts()">
</ngb-pagination>
...
</div>
```

Event-binding:  
pageChange event



File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  listProducts() {

    this.searchMode = ...;

    if (this.searchMode) {
      this.handleSearchProducts();
    }
    else {
      this.handleListProducts();
    }
  }
}
```



# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

```
<div class="footer-pagination">
...
  <ngb-pagination [(page)]="thePageNumber"
                  [pageSize]="thePageSize"
                  [collectionSize]="theTotalElements"
                  (pageChange)="listProducts()">
</ngb-pagination>
...
</div>
```

Event-binding:  
pageChange event

File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  listProducts() {

    this.searchMode = ...;

    if (this.searchMode) {
      this.handleSearchProducts();
    }
    else {
      this.handleListProducts();
    }
  }
}
```

When user clicks a "page" navigation link  
then call the method:  
listProducts()





# Step 5: Enhance HTML template to use ng-bootstrap pagination component

File: product-list-grid.component.html

```
<div class="footer-pagination">
...
  <ngb-pagination [(page)]="thePageNumber"
                  [pageSize]="thePageSize"
                  [collectionSize]="theTotalElements"
                  (pageChange)="listProducts()">
</ngb-pagination>
...
</div>
```

Event-binding:  
pageChange event

File: product-list.component.ts

```
export class ProductListComponent implements OnInit {

  listProducts() {

    this.searchMode = ...;

    if (this.searchMode) {
      this.handleSearchProducts();
    }
    else {
      this.handleListProducts();
    }
  }
}
```

When user clicks a "page" navigation link  
then call the method:  
listProducts()

