Spring mvc

Bootstrap - set up

getbootstrap.com

https://getbootstrap.com/docs/4.5/getting-started/introduction/

1ère méthode avec CDN : méthode simple inscrire ce lien dans votre jsp au niveau de la balise <head>

<link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.0/css/bootstrap.min.css"
integrity="sha384-9aIt2nRpC12Uk9gS9baDl411NQApFmC26EwA0H8WgZl5MYYxFfc+NcPb1dKGj7Sk"
crossorigin="anonymous">

CDN

On peut insérer également des CDN <script> js pour disposer des fonctions javascript de bootstrap 4

```
. . .
<!-- Bootstrap Optional JavaScript -->
<!-- jQuery first, then Popper.js, then Bootstrap JS -->
<script src="https://code.jquery.com/jquery-3.5.1.slim.min.js"</pre>
        integrity="sha384-DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrCXaRkfj"
        crossorigin="anonymous"></script>
<script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.0/dist/umd/popper.min.js"</pre>
        integrity="sha384-Q6E9RHvbIyZFJoft+2mJbHaEWldlvI9I0Yy5n3zV9zzTtmI3UksdQRVvoxMfooAo"
        crossorigin="anonymous"></script>
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.0/is/bootstrap.min.is"</pre>
        integrity="sha384-0gVRvuATP1z7JjHLku0U7Xw704+h835Lr+6QL9UvYjZE3Ipu6Tp75j7Bh/kR0JKI"
        crossorigin="anonymous"></script>
</body>
</html>
```

On ainsi peut tester les composants bootstrap 4

</script>

```
<body>
<but
    type="button" id="btn-popover" class="btn btn-warning"
    data-toggle="popover" title="The button popover"
    data-content="The content for popover comes here. Provide useful tip/information here?">
           <u>Popover</u> (Toggle)
    Button
</button>
<div class="alert alert-primary" role="alert">
 A simple primary alert—check it out!
</div>
<div class="alert alert-success" role="alert">
  A simple success alert with
  <a href="#" class="alert-link">an example link</a>
  Give it a click if you like.
</div>
<button type="button" class="btn btn-primary">Primary/button>
<button type="button" class="btn btn-secondary">Secondary/button>
<script>
    $(document).ready(function(){
                                                                                        4/7
       $('#btn-popover').popover();
    });
```

2nd méthode Download bootstrap-X.X.X-dist. zip

- https://github.com/twbs/bootstrap/releases/download/ v4.5.0/bootstrap-4.5.0-dist.zip
- On le dézippe pour récupérer dans le répertoire css bootstrap.min.css
- On place bootstrap.min.css dans les resources statiques du projet (on sait faire ... cf § 03.03 de ce cours)
- Télécharger *jquery-3.5.1.min.js* depuis le https://code.jquery.com/jquery-3.5.1.min.js (copier coller le contenu dans un fichier que vous créez), et ajouter le fichier avec les resources statiques du projet

Be aware ...

- https://jquery.com/download/
- Bootstrap documentation nous dit qu'il faut déclarer popper.min.js avant bootstrap.js
- Mais bootstrap.bundle.min.js / bootstrap.bundle.js contiennent Popper.js

```
<!-- Bootstrap Optional JavaScript -->
<!-- jQuery first, then Popper.js, then Bootstrap JS Version Local Files--->
<script src="${pageContext.request.contextPath}/resources/js/jquery-3.5.1.min.js">
</script>
<script src="${pageContext.request.contextPath}/resources/js/bootstrap.bundle.min.js">
</script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script
```

Normalement tout fonctionne maintenant

Amusez vous, sortez les crayons de couleur ;-)

On va passer à hibernate, et son projet ORM. Nous aurons l'occasion de compléter les travaux sur les jsp, spring et les template. Nous verrons notamment la pagination et thymleaf, la gestion des exceptions. Car nous allons stocker et éditer des données, nous aurons besoins de vos compétences en spring MVC pour les afficher.