

Structuring Applications

General part

Explain generally about:

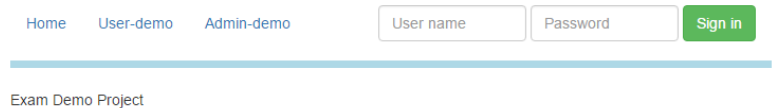
- Explain the purpose(s) of Java Packages and how even large programs can be made "understandable" by means of just package- and file-names.
- Explain the "architecture" of both sides of the seed, which you can clone from here (or better, use your own version with a database): <https://github.com/Lars-m/semesterseedfall2016.git>
- Explain your additions to the seed (in a previous exercise), to handle username and passwords

Practical part

The purpose of this exercise is to show that you hook into existing piece code and "twist" it to your needs.

Getting started: Clone your own version of the Seed (the version with DB-support), and open the project in NetBeans.

1) Change the code to provide a UI as sketched in this figure. Remove all code that is no longer used (leave anything in the components +view2+3 folders, and don't touch the backend yet). For the Home Menu Entry, just show a simple message as sketched on the figure



2) Delete existing users from the DB, and add two new users:

- User-1: userName: **Peter**, password: **test**, role: **User**
- User-2: userName: **Anne**, password: **test**, role: **Admin**

Add the necessary changes to the index.html file so that:

- All Users (even when not signed in) can see (only) the Home menu-item.
- Users logged in with the User-role can see (also) the User-demo menu-item (Use the `$scope.isUser` property)
- Users logged in with the Admin-role can see the Admin-demo menu-item (Use the `$scope.isAdmin` property)

3) Change the User-demo page

- Change the backend REST-service to use the following URI: **api/footballclubs** and return the following hardcoded JSON-array¹:
[{"name": "Liverpool", "url": "http://www.liverpoolfc.com"}, {"name": "Manchester United", "url": "http://www.manutd.com/"}]
- Change the view to show an unordered list, with links for each club received via the call to: `api/footballclubs`
- Add a backend integration test to verify the behaviour of the REST API implemented above

4) Change the Admin-demo page

- Change the Backend REST-service to use the following path: **api/allusers** and return the following hard-coded JSON-array: [{"name": "Jan", "mail": "jan@a.dk"}, {"name": "Ann", "mail": "ann@a.dk"}, {"name": "ib", "mail": "ib@a.dk"}]
- Change the view to show a table with all the users received via the call to: `api/allusers`
- Add a backend integration test to verify the behaviour of the REST API implemented above

5) Upload your solution to DigitalOcean

¹ Hint: create an empty string like "" and paste the content from above into the string, NetBeans will escape all the ""s