

# **React, Components and Routing**

#### **General part**

- Describe the term Single Page Application (SPA) and why it's relevant for modern web-applications
- Describe the overall principles used in React to create a SPA
- Explain the purpose of Client Side Routing in a SPA
- Explain the basic "building blocks" in reac-router
- This exercise provides some "ready to go" start code. Explain what is required to use react-router with a create-react-app project builded from scratch

## **Practical part**

**Note:** You are not supposed to use MobX for this exercise.

In this exercise you should first create two routes, and their corresponding "templates" as sketched below:



### **Getting Started:**

Clone this project, to get the start code for this exercise: <a href="https://github.com/Lars-m/examPrepRouterStartCode.git">https://github.com/Lars-m/examPrepRouterStartCode.git</a> Run npm install, and investigate the provided code before you continue.

- 1) Investigate index.js and observe how we pass in a facade property via props to the RouterComponent. Add the necessary code to read this in the RouterComponent, and pass it on further "down" to Persons component.
- 2) Add the necessary changes to the Persons Component to render all names in a table as sketched above.
- **3)** Add a new Component, Details (right side of figure above) and the necessary changes so you can navigate to the component via this link: persons/details/:id"
- **4)** If not already done, change the table, created in step-2, to provide the required link for each person to navigate into the Details controll.
- 5

Create a new Component NewPerson, and the necessary changes to navigate to the component via the "top-menu" as sketched below. Initially you should just add some dummy text in the component to demonstrate that navigation works.



6)

Add a Form and a save-Button to the NewPerson control, so new persons can be added to the \_persons list (the PersonFacade class include a method; addPerson(..) which you should use for this part).

7) Only do this, if you have used surge (or similar) before. Publish your solution to a public URL and demo it from here

# How this would be graded:

2-4	To fall into this range you must:  Give a <u>minimal to fair</u> performance related to the topics stated in the "General Part"  And  Have completed, ex 1+2 in the practical part with only a few weaknesses
4-7	To fall into this range you must:  Give a <u>fair to good</u> performance related to the topics stated in the "General Part"  And  Have completed, ex 1+2 in the practical part with none or only minor weaknesses  Have completed ex-3+4 with only minor weaknesses
7-10	To fall into this range you must:  Give a <u>very good</u> performance related to the topics stated in the "General Part"  And  Have completed, ex-1 +2 in the practical part with none or only a few minor weaknesses  Have completed, ex 3 +4 in the practical part with only minor weaknesses  Have completed ex 5 with only minor weaknesses and have started on ex 6
10-12	To fall into this range you must:  Give an excellent performance related to the topics stated in the "General Part"  And  Have completed, ex-1+2 in the practical part with no or only a few minor weaknesses  Have completed, all steps in ex-3 +4 in the practical part with only a few minor weaknesses  Have completed ex5+6 with only a few minor weaknesses  Have demonstrated solution via public URL (step 7)