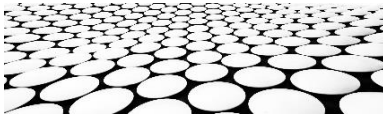


SEG3125 User Interface  
Design and Analysis



## MODULE 8 – TUTORIAL/LAB

### Implementation of The Site of Your Choice



#### GOALS

The goal of Labs 8 and 9 is to implement the site you designed in Lab 7, using React and React Native technologies. React is a popular JavaScript framework in the industry, and you'll find it useful to learn about it. React Native, which requires knowledge of React, enables mobile application development.

Learning these technologies is not trivial and requires an investment of time. So, I will give you 2 options for completing Labs 8 and 9 depending on your level of knowledge of JavaScript and React.

Your two options are:

1. Make a web application with the React framework (level 1)
2. Make a mobile application with the React Native framework (level 2 – you already know React)

No matter which option you choose, your final application (web or mobile) should:

- Be an implementation of your Lab 7 design
- Be in agreement with usability heuristics. Your final application (Lab 9) will be evaluated by heuristic evaluation.
- Be an interactive prototype (everything must be functional without back-end - you can use false data)
- Integrate elements of internationalization (subject of Module 9).

Your final application will be submitted to Laboratory 9. For this laboratory 8, you must submit a video demonstrating your progress (see the Coding section).



#### SUBMISSION DEADLINE

- Tuesday, July 14th, 11:30pm



## SUBMISSION METHOD

- In Brightspace, the Module 8 checklist contains a link for your submission.
- Submit a link to a video demonstrating what you have accomplished so far (screen capture and voice description). Try to be concise and explain everything clearly in 10-12 minutes max.
- In your video:
  - Mention why you chose the Web or Mobile application
  - Mention what you are doing to learn React / React Native (either watching the suggested Net Ninja videos or other methods)
  - Mention what modifications you are making to your Lab 7 design, and why.
  - Discuss the correspondence between your interactive processes defined in Lab 7 and the components you have started coding in React/React Native.
  - Show the functionalities of the components you have created so far.



## INSTRUCTIONS / TUTORIALS

Here are some resources I suggest using:

### Learning React:

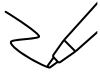
- Listen to videos 1 to 24 of Net Ninja: [Complete React & Redux Introduction](#)
- The application (to-do list) at the end of the 24 videos will show you that you can now make your site.

### Integration of Bootstrap with React:

- To facilitate the layout of your site, you can integrate elements of Bootstrap in React. Look here to do the integration: <https://react-bootstrap.github.io/getting-started/introduction/>
- In Net Ninja videos, the author uses [Materialize](#) to help with styling. You can do the same as him at first, to follow him, but later, when you are comfortable with React, you can return to Bootstrap that you already know well.

### Learning React Native (if you are doing Option 2)

- Listen to Net Ninja: [React Native Tutorial](#) videos. You'll see that the first video mentions that this series on React Native is aimed at people who are already familiar with React.



## DESIGN

As this is an implementation laboratory, your design has already been done at Laboratory 7.

BUT... as we all know, sometimes when we start our implementation, we also modify our design. So don't hesitate to make any changes you find necessary. You can explain these changes in your video.

Also, I am aware that if you choose option 1 (web application), you will not be implementing a mobile application. BUT... I find that the course is already heavy, and it is sufficient to ask you to make a good web application.

Nevertheless, I recommend that you think of your web application as if it were accessed using a phone. So do not hesitate to adapt the design of your site so that it is "mobile first". The reality today is that most websites are accessed mainly by mobile phones.

Once your knowledge of React is more solid, it will be easier for you to go to React Native if you feel like it, after the course, and if your design is already adapted to Mobile, it will be even easier.



## STARTING POINT

Since your projects are all different, I can't really provide a starting code that would help you all.

However, if you follow the Net Ninja course videos, you will see that the author gives a link to his GitHub directory in almost all of his videos. For example, the code for his videos 23 and 24, the culmination of your learning towards a TODO list, is in the directory: :

<https://github.com/iamshaunjp/react-redux-complete-playlist/tree/lesson-23/todoapp>.

Even if 24 videos may seem long to you ... I HIGHLY recommend them! The videos are between 5 and 10 minutes long, so that's about a 3 hour tutorial. And with this 3 hour investment, you will already have a little code that you will understand and which will serve as your starting point.

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## CODING

### Requirements for Laboratory 8:

- Your programming must be done with React or React Native.
- Your site must conform to your Lab 7 design. If you make changes, you can mention these changes in your video.
- Concentrate on the 3 processes that you put in your design (Lab 7) and think about your application in terms of which React components will be associated with each process.
- Begin implementing the components planned in the previous step.
- Have a minimally functional site.

In order not to have any surprises, I also give you below the requirements of Lab 9 for next week:

### Requirements for Laboratory 9:

- Complete the implementation of your site in React or application in React Native.
- Integrate Bootstrap (or another library if you prefer) to make your site not only functional but also pretty and inviting!
- Make your site consistent with usability heuristics because it will be evaluated by a heuristic evaluation.
- Include an internationalization component in your site. (to be better explained next week)



## EVALUATION

- Please note: Exceptionally, this laboratory is worth 1.75%. Then, Lab 9 will be worth 5.25%.
  - You will be evaluated on your video description which will demonstrate your progress towards learning React and starting your application. But... you can't say "it's all coming next week" in your video, you have to show a basic implementation of your 3 processes.
  - We will wait till laboratory 9 to evaluate your application with heuristic evaluation.
  - Any delay beyond the deadline will have a penalty of 10% per day.
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## QUESTIONS

- You can ask your questions in the Module 8 discussion forum on Brightspace.
- There is a consultation schedule for the laboratories in the organization section of the course on Brightspace. That will tell you when a teaching assistant is available on the forum or by zoom.
- You can also send your questions directly to the TA you are assigned to. Refer to the lab consultation schedule to see which TA you are assigned to.