**CS242 Full Stack Web Development – JavaScript/TypeScript**

**LAB05 – Client-Side Web Framework and Library: Vue vs. React**

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**Before You Start**

* If you have questions about the lab requirements, please ask a TA to clarify for you.
* If you are not sure what to do:
  1. Consult the resources listed below.
  2. If you cannot solve the problem after a few tries, ask a TA for help.

**Lab Tasks**

* Create a React app with giving requirements
* Create a Vue app with giving requirements

**Resources**

# Haviv, A. Q. (2014). MEAN Web Development. Packt Publishing, Limited.

# [Node.js official website](https://nodejs.org/en/)

* [React official website](https://reactjs.org/)
* [Vue official website](https://vuejs.org/)

**Lab Requirement:**

In the hands-on practice, we learned how to set up a working environment for both React and Vue. In this lab, you will be asked to transform a traditional HTML page (component) to both React and Vue component.

React Component:

1. Create a React project. Name your app as react-lab.
2. Create a Card component based on the content in [this link](https://gist.github.com/PengWang0316/81f081ded552e7d0bfc21bca8c9c8bbc)

* A Card.tsx file should exist
* A Card.css file should exist
* Card.tsx file should import the Card.css file

1. Remove App.css, App.test.tsx, and App.tsx from your src folder.
2. Update the index.tsx to make it point to the Card.tsx instead of App.tsx
3. Run the React dev server to view the result
4. Push the code to your GitHub repository

Vue Component:cd react

1. Create a Vue project. Name your app as vue-lab.
2. Create a Card component based on the content in [this link](https://gist.github.com/PengWang0316/81f081ded552e7d0bfc21bca8c9c8bbc)

* A Card.vue file should exist under the components folder

1. Remove the HelloWorld component in the App.vue file
2. Import and add the Card component in the App.vue file
3. Run the Vue dev server to view the result
4. Push the code to your GitHub repository

**Lab Submission:**

The requirements for this lab are to capture the screenshot of the below steps from given sections and submit in the word document.

**Part 1**

**challenge #1**

* **content of the Card.tsx file**

**challenge #2**

* **Content of the App.tsx file**

**challenge #3**

* **content of the card.vue file**

**challenge #4**

* **content of the app.vue file**

**challenge #5**

* **browser: output after the dev server runs**

**PART 2**

Write a 70-word summary to explain your understandings and findings from this lab assignment.