**Lab 01 - Working with ReactJS application**

# 1. Introduction

This lab explores creating a ReactJS application by using Vite – A build tool.

# 2. Lab Objectives

In this lab, you will:

* Setting Up the Development Environment
* Scaffold out a starter React application using Vite – a build tool.
* Create components to display the list of Orchids
* Run the project.

**3. Lab Resources**

[images.zip](images.zip" \t "_blank)

# Activity 01: Setting Up the Development Environment

**Step 01**. Dowload and install Node.js and npm

* Download Node.js from the official website: <https://nodejs.org/en/download>

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* After install successfully, check the version of Node and npm:

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**Step 02.** Dowload and install Visual Studio Code

* Go to: <https://code.visualstudio.com/Download>

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* Install VS Code Extensions for React: ES7+ React/Redux/React-Native snippets:

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# Activity 02: Scaffold out a starter React application

**Step 01**. Create **a new folder React-01 in VS Code, using the terminal and type:**

npm create vite@latest demo-01

* Select the options following the image below:

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* Jump to the demo-01 folder and install the packages**:**

cd demo-01

npm install

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**Step 02**. Run the project

npm run dev

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  Description automatically generatedOpen the web browser, access the address: <http://localhost:5173>

# Activity 03: Install the Bootstrap CSS and desgin the App component

**Step 01. Install react-bootstrap and Bootstrap CSS**

npm install react-bootstrap bootstrap

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* Included CSS to your application:

{

/\* The following line can be included in your src/main.jsx or App.jsx file \*/

}

import 'bootstrap/dist/css/bootstrap.min.css';

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**Step 01. Design the NavBar component**

* Adding some code to show the NavBar

import 'bootstrap/dist/css/bootstrap.min.css';

import Container from 'react-bootstrap/Container';

import Nav from 'react-bootstrap/Nav';

import Navbar from 'react-bootstrap/Navbar';

function App() {

return(

<>

<Navbar expand="lg" className="bg-body-tertiary">

<Container>

<Navbar.Brand href="#home">Single Page Application</Navbar.Brand>

<Navbar.Toggle aria-controls="basic-navbar-nav" />

<Navbar.Collapse id="basic-navbar-nav">

<Nav className="me-auto">

<Nav.Link href="#home">Home</Nav.Link>

<Nav.Link href="#link">Link</Nav.Link>

</Nav>

</Navbar.Collapse>

</Container>

</Navbar>

</>

)

}  
export default App;

* The screen will display below:

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**Step 02. Design the List of Orchids component**

* Extract and put images folder into public folder
* Add some code to show the List of Orchids by using Card component, Students provide data for the remaining 7 columns.

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* The screen will display below:

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