a) React Unit Testing:

1) Package.json

"scripts": {

"test": "react-scripts test"

}

"devDependencies": {

"@wojtekmaj/enzyme-adapter-react-17": "^0.6.6",

"enzyme": "^3.11.0",

"should": "^13.2.3",

"should-enzyme": "^2.1.0"

}

2) Jenkinsfile

sh(label: "Run Tests", script: "npm run test")

3) Source Code

import "@testing-library/jest-dom/extend-expect";

import Adapter from "@wojtekmaj/enzyme-adapter-react-17";

import { configure, shallow } from "enzyme"; //mount option

import React from "react";

import "should";

import "should-enzyme";

import TestComponent from "./TestComponent";

configure({

adapter: new Adapter(),

});

describe("<TestComponent />", () => {

const updatePatientListMock = jest.fn();

it("TestComponent loads properly when list is empty", () => {

const testComponent = shallow(

< TestComponent

patientList={[]}

updatePatientList={updatePatientListMock}

/>

);

expect(testComponent.find(".patientListBodyEmpty").exists()).toEqual(true);

expect(testComponent.find(".print\_batch\_summary\_body\_cell").length ).toEqual(5);

});

it("TestComponent loads properly when PatientList have value", () => {

const testComponent = shallow(

<PatientListBody

patientList={[

{

id: "10",

date: new Date(),

type: "",

shorttype: "",

patientName: "John King",

patientId: "22122",

patientAgeAndSex: "30 M",

patientFirstName: "John",

patientLastName: "king",

patientDOB: "02-11-1985",

notes: " ",

provider: "Test",

checked: false,

status: "confirmed",

disabled: false,

},

]}

updatePatientList={updatePatientListMock}

/>

);

expect(testComponent.find(".patientListBodyEmpty").exists()).toEqual(true);

expect(testComponent.find(".print\_batch\_summary\_body\_cell").length ).toEqual(5);

});

});

b) React Code coverage Testing:

1) Package.json

"scripts": {

"coverage": "react-scripts test --coverage --watchAll=false"

}

"devDependencies": {

"jest-enzyme": "^7.1.2"

}

"coverage": {

"collectCoverage": true

}

2) Jenkinsfile

sh(label: "Run code coverage", script: "npm run coverage")

3) Response

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File | % Stmts | % Branch | % Funcs | % Lines | Uncovered Line #s

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**App.tsx**  |  **52.05** |  **33.33** |  **22.22** |  **52.05** | **108-111,116-128,132-140,144-171,175-193,198,212,227**

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