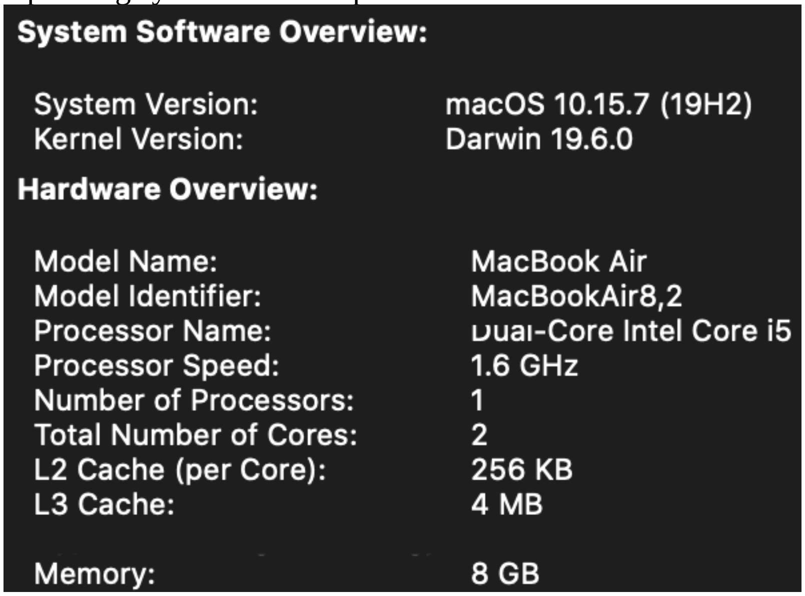
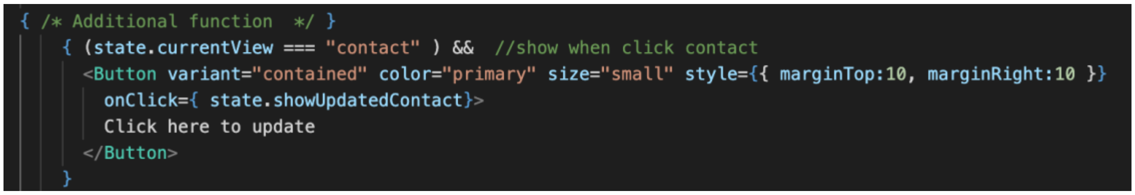
WEB PROGRAMMING
Practice M7

1. Browser: Safari, Version 14.0
2. Operating system and Computer Architecture:

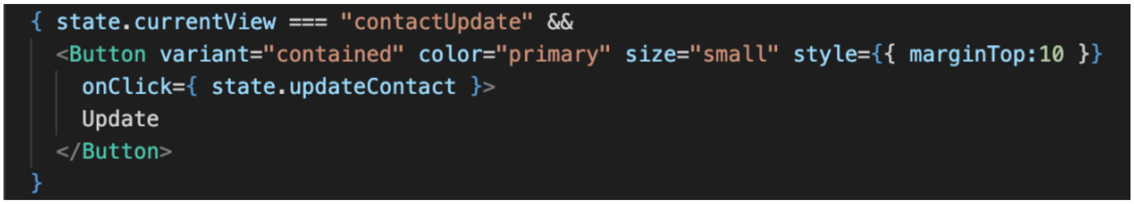


```
System Software Overview:

  System Version:              macOS 10.15.7 (19H2)
  Kernel Version:              Darwin 19.6.0

Hardware Overview:

  Model Name:                    MacBook Air
  Model Identifier:              MacBookAir8,2
  Processor Name:                Dual-Core Intel Core i5
  Processor Speed:               1.6 GHz
  Number of Processors:          1
  Total Number of Cores:         2
  L2 Cache (per Core):           256 KB
  L3 Cache:                      4 MB

  Memory:                        8 GB
```

3. How AJAX helps your web application:
   a. Make the browser's performance faster browsing speed and providing a responsive user experience
   b. object-oriented helper functions that can improve productivity
   c. Compatibility, it can be compatible with ASP.NET, J2EE, PHP, or any languages
4. Additional features:
   a. Add buttons in ContactView.tsx

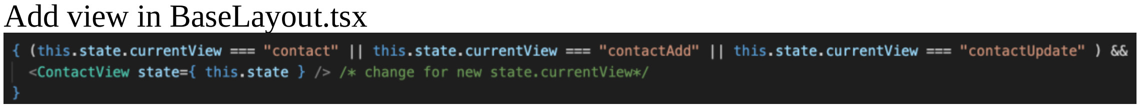


```
{ /* Additional function  */ }
    { (state.currentView === "contact" ) &&  //show when click contact
      <Button variant="contained" color="primary" size="small" style={{ marginTop:10, marginRight:10 }}
        onClick={ state.showUpdatedContact}>
        Click here to update
      </Button>
    }
```



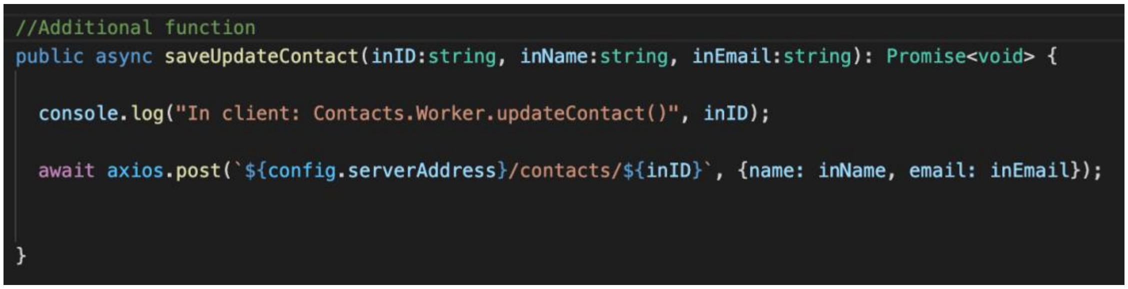
```
{ state.currentView === "contactUpdate" &&
  <Button variant="contained" color="primary" size="small" style={{ marginTop:10 }}
    onClick={ state.updateContact }>
    Update
  </Button>
}
```

   b. Add view in BaseLayout.tsx



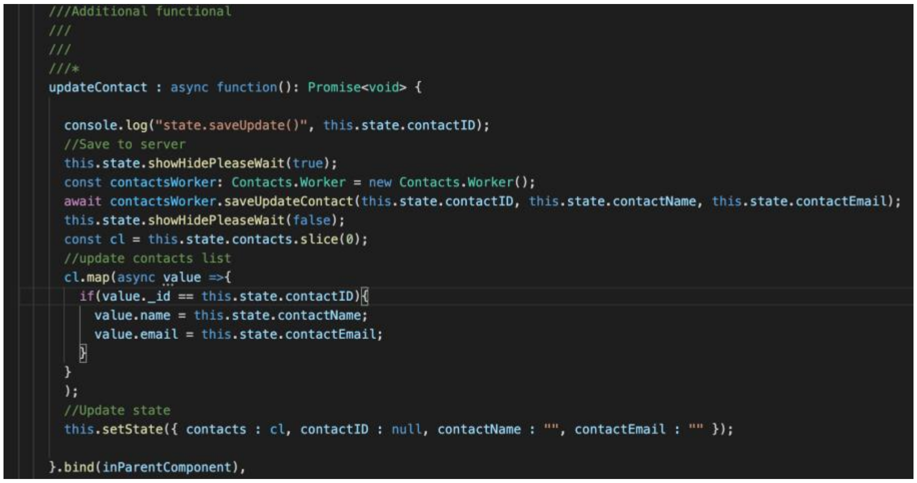
```
{ (this.state.currentView === "contact" || this.state.currentView === "contactAdd" || this.state.currentView === "contactUpdate" ) &&
  <ContactView state={ this.state } /> /* change for new state.currentView*/
}
```

   c. Contact.tsx



```
//Additional function
public async saveUpdateContact(inID:string, inName:string, inEmail:string): Promise<void> {

  console.log("In client: Contacts.Worker.updateContact()", inID);

  await axios.post(`${config.serverAddress}/contacts/${inID}`, {name: inName, email: inEmail});


}
```

d. State.tsx



```
///Additional functional
///
///
///*
updateContact : async function(): Promise<void> {

  console.log("state.saveUpdate()", this.state.contactID);
  //Save to server
  this.state.showHidePleaseWait(true);
  const contactsWorker: Contacts.Worker = new Contacts.Worker();
  await contactsWorker.saveUpdateContact(this.state.contactID, this.state.contactName, this.state.contactEmail);
  this.state.showHidePleaseWait(false);
  const cl = this.state.contacts.slice(0);
  //update contacts list
  cl.map(async value =>{
    if(value._id == this.state.contactID){
      value.name = this.state.contactName;
      value.email = this.state.contactEmail;
    }
  }
  );
  //Update state
  this.setState({ contacts : cl, contactID : null, contactName : "", contactEmail : "" });

}.bind(inParentComponent),
```

e.