## **Ch 9 Written Exercise**

## Jade Holt

SOAP is a type of protocol that allow elements to be distributed to communicate. It can be carried to lower-level protocols and HTTP. SOAP support addressing, security and format-independence. The advantages is that the sender can create a message route that is based on logical services while on its way to its destination. SOAP is XML based which is similar to HTML, because of this the messages from SOAP is easy to understand. The disadvantages of SOAP is that it is a heavy weight and the messages that it pass through is a mix protocol and service bus architecture and they both are not reasonably optimal. The difference with between SOAP and REST is that REST interactions are based on the HTTP protocol. REST is over HTTP which makes it simple, flexible and it goes out its way to exchange information. SOAP rides on HTTP what that means is that it connect to the computing tools and application components.

REST was designed to work with media components, files, or objects that are on hardware devices. A Restful service uses HTTP verbs such as GET, POST, PUT and DELETE. REST does have disadvantages, it lacks security, it is best to use it for the public versus private where the client want to send something to the server. REST lacks state, it puts the burden on the client which makes things difficult by making the client application heavier and harder to maintain.

https://searchapparchitecture.techtarget.com/definition/SOAP-Simple-Object-Access-Protocol

https://www.guru99.com/comparison-between-web-services.html#:~:text=SOAP%20stands%20for%20Simple%20Object%20Access%20Protocol%20whereas%20REST%20stands,REST%20is%20an%20architectural%20pattern.&text=SOAP%20only%20works%20with%20XML,can%20make%20use%20of%20SOAP.