

Assignment 34.



1) SOAP fault is caused due to client or server failure. State T/F ~~with~~

→ false.

2) Give the use of Soap Actor attribute.

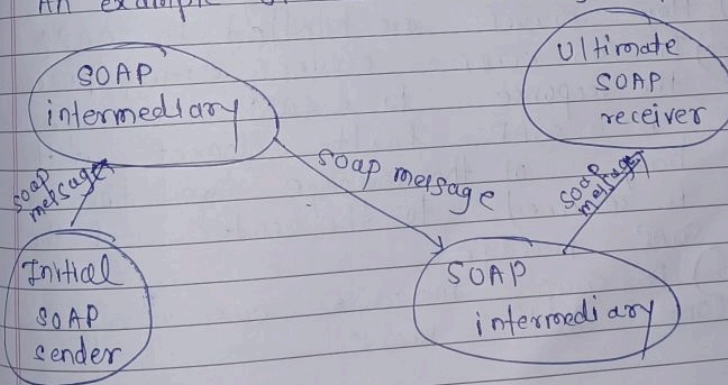
→ ① The attribute is used to annotate an extension element.

② The header element may pass through different endpoints before it reaches the receiver.

3) What is SOAP message path?

→ The SOAP message path is the set of SOAP nodes through which a single SOAP message passes, including the initial SOAP sender, zero or more SOAP intermediaries and an ultimate SOAP receiver.

An example of a SOAP message path.



Q4) Give the use of SOAP must understand attribute

- 1) The SOAP must understand attribute can be used to indicate whether a header entry is mandatory.
- 2) If you add must understand = "1" to a child element of the Header element it indicates that the receiver processing the Header must recognize the element.

Q5) Explain in short Apache Axis environment

- Apache Axis is a SOAP toolkit that makes it easy to create, deploy & consume web services by using AXIS we will be able to quickly convert existing Java functionality into web services.

Q6) How errors are handled in SOAP?

- 1) If an error occurs during processing the response to a SOAP message is a SOAP fault element in the body of the message and the fault is returned to the sender of the SOAP message.
- 2) A SOAP message can carry only one fault block.

3) fault is an optional part of a SOAP message.

4) The SOAP fault has the following sub elements

1) <faultcode>

2) <faultstring>

3) <faultactor>

4) <detail>

Q7) SOAP fault code.

1) SOAP-ENV: VersionMismatch.

2) SOAP-ENV: Client

3) SOAP-ENV: Server.

Q8) Give the advantages and disadvantages of SOAP.

→ Advantages:- 1) Simple to use.

2) Platform and language independent.

3) Firewall friendliness.

4) Use of open standards.

5) Highly flexible.

Disadvantages of SOAP:-

1) It is statelessness.

2) SOAP is considerably slow.

3) Serialization by value and not by reference.

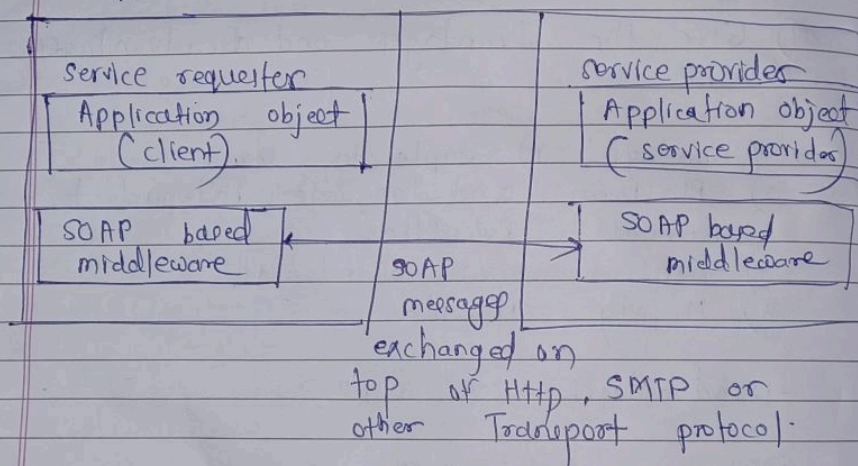
as) Draw the structure of SOAP with attachments give an example and explain it.

eq) Write the anatomy of SOAP message and describe each element.

alo) What is SOAP? Give the structure of SOAP message explain it?

→ i) SOAP is the standard messaging protocol used by webservices.

ii) SOAP's Primary application in enter application communication.

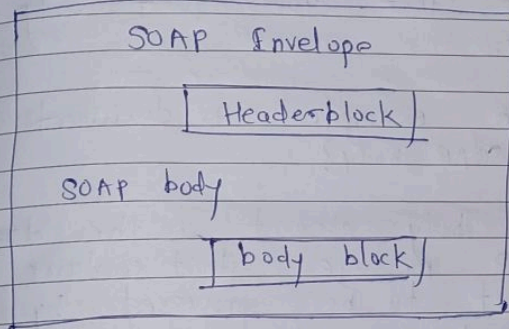


A soap message is an ordinary XML document containing the following elements

i) Envelope = Defines the start & the end of the message. It is a mandatory element.

ii) Body = Contains the xml data comprising the message being sent.

iii) fault: An optional fault element that provides information about error that occurs while processing the message.



Structure of SOAP message.

Q11) Write in detail on SOAP with attachments.

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- ① SWA (SOAP with Attachment also known as MIME for web services).
 - ② MTOM Attachments.
 - ③ Set the enable MTOM request property to type.
 - ④ Add a file to the attachment tab as it was described above.
 - ⑤ In the part of column select the id identifier that your request body specifies.

or 2) Write an example of document styled SOAP body?

→ The SOAP body element is the element in a SOAP message that contains the main part to be processed by either client or web server. While element is mandatory you must have a body element in a SOAP message.

Here is the example of a SOAP body element.

```
<?xml version = "1.0"?>
<env:Envelope xmlns:env = "http://www.w3.org/2001/12/soap-envelope">
```


$\langle \text{env: Header} \rangle$
 $\langle \text{env: Header} \rangle$
 $\langle \text{env: Body} \rangle$
 $\langle \text{env: Body} \rangle$
 $\langle \text{env: Envelope} \rangle$

Q.9) What do you mean by wire protocol and transport protocol?

→ Wire protocol:- A wire protocol refers to a way of getting data from point to a point. A wire protocol is needed if more than one application.

Transport protocol:-

The most widely used two transport protocols are user datagram Protocol (UDP) and the Transport Control Protocol (TCP).

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<env: Header>
</env: Header>
<env: Body>
</env: Body>
<env: Envelope>

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