# Customer Inquiry

1. **Providers / Consumers**
   1. A Provider provides information through JX
   2. A Consumer consumes information through JX
   3. In this homework, we’re presenting as if we’re the provider, and a request from a consumer has been made to us for some information.
2. **All about the contract**
   1. Contract defines the request that will come from JX, and the response from the provider.
3. **Request**
   1. <http://mmoimjhag:9005/XSDContracts/ReleaseCandidate/PublicationFiles/TPGPub/Validation/TPG_CustomerMaster/TPG_CustomerMaster_xsd_Element_CustInq.html#CustInq>
   2. Most all requests will contain header information that outlines things like:
      1. The version of JX
      2. The user id
      3. Institution Routing Ids
      4. Institution Environments
   3. The request will contain information required by the service for the service to give a response.
   4. Ex: A Customer Inquiry must specify some information so that the provider service can look up the customer.
      1. Customer Id
      2. Account Id
4. **Response**
   1. <http://mmoimjhag:9005/XSDContracts/ReleaseCandidate/PublicationFiles/TPGPub/Validation/TPG_CustomerMaster/TPG_CustomerMaster_xsd_Complex_Type_CustRec_CType.html#CustRec_CType_CustDetail>
   2. Return the same header information from the request
   3. According to the contract, return information that fulfills the request
   4. Ex: Return information about the customer for which the inquiry was made
      1. Customer ID
      2. Account ID
      3. Name, Address, Birthdate, etc……
5. **JXF Provider (thanks to Matt and Eric)**
   1. Provides the framework that does most of the heavy lifting
   2. What kinds of things are left to fill in to implement a service?
      1. Soap Action - HTTP request header field can be used to indicate the intent of the SOAP HTTP request. The value is a URI identifying the intent.
      2. Java objects representing requests and responses.
      3. XSLT files that transform soap xml requests into Java objects and java objects into soap responses.
      4. Error messages
      5. Fulfill the service by returning requested information or performing requested action.
6. **Soap Action**
   1. <http://jackhenry.com/ws/CustInq\>
7. **Java Object – Request**

private String custId;

public String getCustId()

public void setCustId(String custId)

……..AccountId…………..

1. **Java Object – Response**

private String custId;

private String accountId;

private String personName;

private String addr;

……….getters/setters……….

1. **XSLT transforming Soap XML request into Java Request Object**

**xsl:template match**=*"ns:CustInq"***>**

<BSACustInqSrchRequest>

<custId>

**<xsl:value-of select**=*"ns:CustId"* **/>**

</custId>

</BSACustInqSrchRequest>

**</xsl:template>**

1. **XSLT transforming Java Response Object into Soap XML response**

<xsl:template match="CustInqResponse">

<ns:CustInqResponse>

<ns:MsgRqHdr>

<xsl:copy-of select="//inboundMessage//ns:MsgRqHdr/ns:jXchangeHdr" />

</ns:MsgRqHdr>

<ns:CustRec>

<ns:CustDetail>

<xsl:if test="personName">

<ns:PersonName>

<xsl:value-of select="personName" />

</ns:PersonName>

</xsl:if>

<xsl:if test="addr">

<ns:Addr>

<xsl:value-of select="addr" />

</ns:Addr>

</xsl:if>

<xsl:if test="naicsCode">

<ns:NAICSCode>

<xsl:value-of select="naicsCode" />

</ns:NAICSCode>

</xsl:if>

<xsl:if test="birthDate">

<ns:BirthDt>

<xsl:value-of select="birthDate" />

</ns:BirthDt>

</xsl:if>

<xsl:if test="lastMaintDate">

<ns:LastMainDt>

<xsl:value-of select="lastMaintDate" />

</ns:LastMainDt>

</xsl:if>

</ns:CustDetail>

<xsl:if test="custId">

<ns:CustId>

<xsl:value-of select="custId" />

</ns:CustId>

</xsl:if>

<xsl:if test="accountId">

<ns:AccountId>

<xsl:value-of select="accountId" />

</ns:AccountId>

</xsl:if>

</ns:CustRec>

</ns:CustInqResponse>

</xsl:template>

1. Homework
   1. Find contracts here:
      1. <http://mmoimjhag:9005/>
      2. R2016.0.05
         1. JHAPub
         2. Validation
         3. TPG\_CustomerMaster
            1. Group – Main
         4. TPG\_IMSMaster
            1. Group – Main\_JHA (this is where DD on JX services live)
   2. Devs
      1. Create Java classes representing Request and Response for some contract
      2. Create XSLT transformation files
   3. QA
      1. Outline a request and expected response in XML for a contract.