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<?xml version="1.0"?>
<wsdl:definitions xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/">
  <wsdl:types>
    <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema">
      <xsd:element name="SearchTuples">
        <xsd:complexType>
          <xsd:element name="TupleType" type="string"/>
        </xsd:complexType>
      </xsd:element>

      <xsd:element name="SearchVendors">
        <xsd:complexType>
          <xsd:element name="productID" type="string"/>
          <xsd:element name="location">
            <xsd:complexType>
              <xsd:sequence>
                <xsd:element name="longitude" type="double"/>
                <xsd:element name="latitude" type="double"/>
              </xsd:sequence>
            </xsd:complexType>
          </xsd:element>
        </xsd:complexType>
      </xsd:element>

      <xsd:element name="TupleAdvertisement">
        <xsd:complexType>
          <xsd:sequence>
            <xsd:element name="productID" type="string"/>
            <xsd:element name="location">
              <xsd:complexType>
                <xsd:sequence>
                  <xsd:element name="longitude" type="double"/>
                  <xsd:element name="latitude" type="double"/>
                </xsd:sequence>
              </xsd:complexType>
            </xsd:element>
            <xsd:element name="numberAvailable" type="int"/>
            <xsd:element name="price" type="int"/>
            <xsd:element name="picture" type="xsd:ENTITY"/>
            <xsd:element name="description" type="string"/>
            <xsd:element name="merchantID" type="string"/>
          </xsd:sequence>
        </xsd:complexType>
      </xsd:element>

      <xsd:element name="ProductList">
        <xsd:complexType>
          <xsd:element name="TupleType" type="TupleAdvertisement"
maxOccurs="unbounded"/>
        </xsd:complexType>
      </xsd:element>

      <xsd:element name="ProductRequest">
        <xsd:complexType>
          <xsd:sequence>
            <xsd:element name="productID" type="string"/>
          </xsd:sequence>
        </xsd:complexType>
      </xsd:element>
    </xsd:schema>
  </wsdl:types>

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    <xsd:element name="consumerLocation">
      <xsd:complexType>
        <xsd:sequence>
          <xsd:element name="longitude" type="double"/>
          <xsd:element name="latitude" type="double"/>
        </xsd:sequence>
      </xsd:complexType>
    </xsd:element>
    <xsd:element name="numberOrdered" type="int"/>
    <xsd:element name="requestID" type="string"/>
    <xsd:element name="merchantID" type="string"/>
    <xsd:element name="consumerID" type="string"/>
  </xsd:sequence>
</xsd:complexType>
</xsd:element>

<xsd:element name="Request">
  <xsd:complexType>
    <xsd:element name="requestID" type="string"/>
  </xsd:complexType>
</xsd:element>

<xsd:element name="RequestResponse">
  <xsd:complexType>
    <xsd:element name="requestID" type="string"/>
    <xsd:element name="response" type="string"/>
  </xsd:complexType>
</xsd:element>

<xsd:element name="LocatedNear">
  <xsd:complexType>
    <xsd:element name="requestID" type="string"/>
    <xsd:element name="GreetingMessage" type="string"/>
  </xsd:complexType>
</xsd:element>
</xsd:schema>
</wsdl:types>

<wsdl:message name="ProductSearch">
  <wsdl:part name="body" element="SearchTuples"/>
</wsdl:message>

<wsdl:message name="ProductSearchResponse">
  <wsdl:part name="body" element="ProductList"/>
</wsdl:message>

<wsdl:message name="SearchForVendors">
  <wsdl:part name="body" element="SearchVendors"/>
</wsdl:message>

<wsdl:message name="VendorSearchResponse">
  <wsdl:part name="body" element="ProductList"/>
</wsdl:message>

<wsdl:message name="ProductPurchaseRequest">
  <wsdl:part name="body" element="ProductRequest"/>
</wsdl:message>

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<wsdl:message name="SubscribeForResponses">
  <wsdl:part name="body" element="Request"/>
</wsdl:message>

<wsdl:message name="VendorNotification">
  <wsdl:part name="body" element="Request"/>
</wsdl:message>

<wsdl:message name="getResponse">
  <wsdl:part name="body" element="Request"/>
</wsdl:message>

<wsdl:message name="VendorResponse">
  <wsdl:part name="body" element="RequestResponse"/>
</wsdl:message>

<wsdl:message name="SubscribeForBuzz">
  <wsdl:part name="body" element="Request"/>
</wsdl:message>

<wsdl:message name="BuzzNotification">
  <wsdl:part name="body" element="Request"/>
</wsdl:message>

<wsdl:message name="getBuzz">
  <wsdl:part name="body" element="Request"/>
</wsdl:message>

<wsdl:message name="VendorBuzz">
  <wsdl:part name="body" element="LocatedNear"/>
</wsdl:message>

<wsdl:portType name="Purchasing">
  <!-- Operations-->
  <wsdl:operation name="SearchProducts">
    <wsdl:output message="ProductSearch"/>
    <wsdl:input message="ProductSearchResponse"/>
  </wsdl:operation>

  <wsdl:operation name="SearchVendors">
    <wsdl:output message="SearchForVendors"/>
    <wsdl:input message="VendorSearchResponse"/>
  </wsdl:operation>

  <wsdl:operation name="BuyProduct">
    <wsdl:output message="ProductPurchaseRequest"/>
  </wsdl:operation>

  <wsdl:operation name="ResponseSubscribe">
    <wsdl:output message="SubscribeForResponses"/>
    <wsdl:input message="VendorNotification"/>
  </wsdl:operation>

  <wsdl:operation name="getVendorResponse">
    <wsdl:output message="getResponse"/>
    <wsdl:input message="getVendorResponse"/>
  </wsdl:operation>
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    <wsdl:operation name="BuzzSubscribe">
      <wsdl:output message="SubscribeForBuzz"/>
      <wsdl:input message="BuzzNotification"/>
    </wsdl:operation>

    <wsdl:operation name="getBuzz">
      <wsdl:output message="getBuzz"/>
      <wsdl:input message="VendorBuzz"/>
    </wsdl:operation>
  </wsdl:portType>

  <wsdl:binding name="Purchase" type="Purchasing">

    <soap:binding transport="http://schemas.xmlsoap.org/soap/http"
style="document"/>

    <wsdl:operation name="SearchProducts">
      <soap:operation style="document" soapAction="http://Lime.com/tuplespace/
interface/rdg"/>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
    </wsdl:operation>

    <wsdl:operation name="SearchVendors">
      <soap:operation style="document" soapAction="http://Lime.com/tuplespace/
interface/rdg"/>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
    </wsdl:operation>

    <wsdl:operation name="BuyProduct">
      <soap:operation style="document" soapAction="http://Lime.com/tuplespace/
interface/out"/>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
    </wsdl:operation>

    <wsdl:operation name="ResponseSubscribe">
      <soap:operation style="document" soapAction="http://Lime.com/tuplespace/
interface/reactsTo"/>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
    </wsdl:operation>

    <wsdl:operation name="getVendorResponse">

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        <soap:operation style="document" soapAction="http://Lime.com/tuplespace/
interface/in"/>
        <wsdl:output>
            <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:input>
            <soap:body use="literal"/>
        </wsdl:input>
    </wsdl:operation>

    <wsdl:operation name="ReactToRequest">
        <soap:operation style="document" soapAction="http://Lime.com/tuplespace/
interface/reactsTo"/>
        <wsdl:output>
            <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:input>
            <soap:body use="literal"/>
        </wsdl:input>
    </wsdl:operation>

    <wsdl:operation name="BuzzSubscribe">
        <soap:operation style="document" soapAction="http://Lime.com/tuplespace/
interface/reactsTo"/>
        <wsdl:output>
            <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:input>
            <soap:body use="literal"/>
        </wsdl:input>
    </wsdl:operation>

    <wsdl:operation name="getBuzz">
        <soap:operation style="document" soapAction="http://Lime.com/tuplespace/
interface/in"/>
        <wsdl:output>
            <soap:body use="literal"/>
        </wsdl:output>
        <wsdl:input>
            <soap:body use="literal"/>
        </wsdl:input>
    </wsdl:operation>

</wsdl:binding>

<wsdl:service name="ConsumerService">

    <wsdl:port name="ConsumerPort" binding="Purchase">

        <soap:address location="http://239.0.0.1/ClientA"/>

    </wsdl:port>

</wsdl:service>

</wsdl:definitions>

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