Narrative

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- How did you decide to represent the data in the way that you did? Why did you choose the elements and attributes that you did?
- I decided to represent my data in the way that I did by looking at how to develop a xml schema that could be used interchangeably by the “Advantage 360” cell phone company for all its customers across its many branches around the country. The document that I choose captures the customer and company information as well as details of the prior and new charges which allowed for me to design a schema that could be used for invoices that the company could send to a client. I choose to assign the unique values such as invoiceDate, invoiceNumber and customerId as attributes because attributes cannot contain multiple values and are more difficult to manipulate by program code which is fine because these items should be unique. Furthermore, these attributes are requirements in my schema design. Lastly, the elements I chose were pieces of information from the document that could be easily interchanged for every billing invoice and followings the structure of the document that I based the schema from.
- What were the hardest decisions you had to make in this design process?
    - The hardest decisions I had to make stemmed from deciding what were the attributes or elements in my design. As well as deciding which pieces of information would be listed as requirements. Furthermore, for my schema design sacrifices capturing every individual detail for simplicity. For example, my schema does not list every individual charge that the customer accord in order to get their total bill amount; thus, I would say my schema is a simplified design that captures those important details for billing a customer from the respective company.
- How does your XSD design support data independence?
    - My XSD design supports data independence by allowing for its elements to easily be interchanged. For example, the schema can easily be modified to serve send invoices to all its customers, and my XSD design breaks it into 4 parts: customer information, company information, invoice date and invoice charges details.

- How may your XSD design support the overarching goals of data curation (revisit objectives and activities of Week 1). Discuss at least **10** objectives, how many of you were able to achieve and how many of them were not able to?
    - My XSD design supports the following: security, collection, organization (design structure is easy to follow), discoverability (xml design is on a public github repo making discovery easy), storage, identification (easily able to identify elements/attributes and know what they represent), communication, sharing (xsd design location is in a public space), communication and provenance
    - My XSD design doesn't support the following: access (all attributes are restricted and required), reformatting, modification (more challenging to modify attributes), and compliance (no legal guidelines were set)
- What are the design's pros and cons? Write at least 1 pro and 1 con.
    - Design Pro: Simplicity and easy to follow and most importantly it supports to the objective of discoverability by being housed in a public space that is easy to gain access to
    - Design Con: It does not easily support modification which would make manipulate attributes in the xsd more difficult for lets say if another similar company were to want to follow this design because currently "Advantage 360" and their email are requirements for the schema to be utilized