Assignment 2

Part 2

Text source is found online from my workplace and only partial of the text is used for this assignment. I have attached “Reference Document.docx” inside the zip file which indicate the part that I used. Please see reference link below for citation.

Part 3

See assignment2.xml file attached

Part 4

Elements:

|  |  |  |
| --- | --- | --- |
| Elements | Contained Values | Description |
| new\_article | title, author, publish\_date, notice\_to, body, tags | Root element that represents the news article. It contains the sub-elements that also belong to this element. |
| title | #PCDATA | Title of this article |
| author | #PCDATA | Author of this article and the department that he/she belong to. |
| publish\_date | #PCDATA | Date when the article published to |
| notice\_to | #PCDATA | Location that the article released |
| body | introduction, affects, possible\_symptoms, mental\_health\_screening, self\_care, guiding\_principle, reach\_out, getting\_support, military, civilian, more\_info | Content of article |
| introduction | #PCDATA | Introduction of this mental issue |
| affects | #PCDATA | Affects to the employee |
| possible\_symptoms | symptoms+ | List of symptoms elements |
| symptoms | #PCDATA | Possible symptoms |
| mental\_health\_screening | #PCDATA|link | Place for screening |
| self\_care | #PCDATA | Possible self-care |
| guiding\_principle | suggestion+ | List of suggestion elements |
| suggestion | #PCDATA | Suggestion to relief symptoms |
| reach\_out | #PCDATA | Point to reach out |
| getting\_support | #PCDATA | Who and where to get support |
| military | #PCDATA|link|phone\_number | Military information |
| link | #PCDATA | Link with url |
| phone\_number | #PCDATA | Phone number |
| civilian | #PCDATA|link|phone\_number | Civilian information |
| more\_info | #PCDATA|link | Other information |
| tags | tag+ | List of tag elements |
| tag | #PCDATA | Tag name |

Attributes

|  |  |  |
| --- | --- | --- |
| Attributes | Contained values | Description |
| news\_article id | ID #REQUIRED | A unique id for the news article and it is a required attribute. |
| title fontsize | 18|20|24|30 | This attribute represents the font size for title. The controlled list of values is 18, 20, 24, and 30. |
| title isbold | true|false | This attribute represents the bold option for title. The controlled list of values is true and false |
| notice\_to isbold | true|false | This attribute represents the bold option for notice\_to. The controlled list of values is true and false |
| link url | CDATA #REQUIRED | This attribute represents url to the link element and it is a required attribute. |

Part 6

* 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?
  + This article is from my workplace that is to raise a concern on mental illness lead by COVID-19. I am trying to get the central ideas of the document and create each element to make sure it provides accurate description. Then, outline the basic structures and readable by both humans and software.
* What were the hardest decisions you had to make in this design process?
  + Hard to design the elements names and consider the number of elements that needed. Sometime too many elements will increase confusion and sometimes nested elements is needed.
* How does your DTD design support data independence?
  + Data independence is achieved because each XML documents are specified designed by the owner of the documents which the structure and schema would be independently different from others.
* How may your DTD design support the overarching goals of data curation?
  + Preservation – elements can tailor the audience to understand the information
  + Provenance – elements also can help audience to identify the data
  + Modification – adding data can simply adding the elements in the DTD XML file
  + Sharing – sharing would be easier since others can get your mindset by reading the elements
* What are the pros and cons of your DTD design?
  + Pros:
    - very specific on each part of the documents.
    - DTD is simple and straight forward to understand
    - Template for other mental issue document
  + Cons:
    - some elements have very similar name
    - complex formats and sometimes maybe overcomplicated
    - Only for mental issue, it cannot be used for other type – low flexibility

Reference Link:

Chadwick, G. (2020, September 24). Understanding Depression. Retrieved October 11, 2020, from https://www.edwards.af.mil/News/Article/2360791/understanding-depression/