Part 1 Question 1

1. Description of File A and File B

**File A**

Consumer\_Complaints\_FileA is a xml file with no DTD defined which contains 8 customer complaints. Format of complaint id 14038 is different from previous 7. The tags order of 14038 are company, event, submitted, issue, product, event, and response. However, it should be event, product, issue, company, submitted, and response. MD5 checksum is D30CBA6B00308A87FA3A384799C5FAF7

Elements

|  |  |  |
| --- | --- | --- |
| Elements | Contained Values | Description |
| consumerComplaints | complaint+ | Root elements that represent the report of customer complaints. It contains a list of complaint sub-elements |
| complaint | event, product, issue, company, submitted, response | Content of complaint |
| event | #PCDATA | Contains attributes type and date only. |
| product | productType, subproduct | Contains element of productType and subproduct |
| productType | #PCDATA | Name of the productType |
| subproduct | #PCDATA | Name of the subproduct |
| issue | issueType, subissue | Contains two elements: issueType, and subissue |
| issueType | #PCDATA | Name of issueType |
| subissue | #PCDATA | Details of subissue |
| consumerNarrative | #PCDATA | Written statement that consumer wrote. |
| company | companyName, companyState, companyZip | Contains three elements: companyName, companyState, and companyZip |
| companyName | #PCDATA | Company’s Name |
| companyState | #PCDATA | Company’s located state |
| companyZip | #PCDATA | Company’s zip code |
| response | publicResponse, responseType | Contains two elements: publicResponse and responseType |
| publicResponse | #PCDATA | Statement that did company provide public response |
| responseType | #PCDATA | Closed and its response |

Attributes

|  |  |  |
| --- | --- | --- |
| Attributes | Contained values | Description |
| complaint id | CDATA #REQUIRED | Unique ID number for each complaint |
| event type | received|sentToCompany | Indicate the event type |
| event date | CDATA #REQUIRED | Date’s format in “YYYY-MM-DD” |
| submitted via | Web|Phone|Referral | It indicates the submission method of complaint. |
| response timely | Y|N | Y or N indicate whether the response is in timely manner |
| response consumerDisputed | Y|N | Y or N indicate whether the case is disputed |

**File B**

Consumer\_Complaints\_FileB is a xml file with minimal internal DTD defined which contains 8 customer complaints. Instead of using attribute “submitted via” in File A, File B used attribute “complaint submissionType”. Missing events in complaint of 14038. Commented line in complaint 837784. MD5 checksum is 47677272E76E1F4332AFE859347C8695.

Elements

|  |  |  |
| --- | --- | --- |
| Elements | Contained Values | Description |
| consumerComplaints | complaint+ | Root elements that represent the report of customer complaints. It contains a list of complaint sub-elements |
| complaint | event, product, issue, company, submitted, response | Content of complaint |
| event | #PCDATA | Contains attributes type and date only. |
| product | productType, subproduct | Contains two elements: productType and subproduct |
| productType | #PCDATA | Name of the productType |
| subproduct | #PCDATA | Name of the subproduct |
| issue | issueType, subissue | Contains two elements: issueType, and subissue |
| issueType | #PCDATA | Name of issueType |
| subissue | #PCDATA | Details of subissue |
| consumerNarrative | #PCDATA | Written statement that consumer wrote |
| company | companyName, companyState, companyZip | Contains three elements: companyName, companyState, and companyZip |
| companyName | #PCDATA | Company’s Name |
| companyState | #PCDATA | Company’s located state |
| companyZip | #PCDATA | Company’s zip code |
| response | publicResponse, responseType | Contains two elements: publicResponse and responseType |
| publicResponse | #PCDATA | Statement that did company provide public response |
| responseType | #PCDATA | Closed and its response |

Attributes

|  |  |  |
| --- | --- | --- |
| Attributes | Contained values | Description |
| complaint id | CDATA #REQUIRED | Unique ID number for each complaint |
| complaint submissionType | Web|Phone|Referral | Indicate the submission type Web or Phone or Referral |
| event type | received|sentToCompany | Indicate the event type |
| event date | CDATA #REQUIRED | Date’s format in “YYYY-MM-DD” |
| response timely | yes|no | yes or no indicate whether the response is in timely manner |
| response consumerDisputed | Y|N | Y or N indicate whether the case is disputed |

Part 1 Question 2

Please see the attached files:

Consumer\_Complaints\_FileA\_DTD\_Step2.xml

Graphical user interface, text, application

Description automatically generated

Consumer\_Complaints\_FileB\_DTD\_Step2.xml

Graphical user interface, application

Description automatically generated