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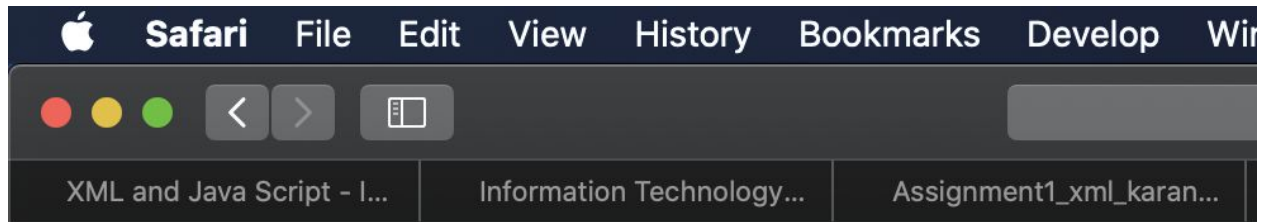
## Assignment 1

Ans 1)

1. Degrees and degrees both are different tags as XML is case sensitive. It needs to have same opening and closing element
2. Applied CSS to XML.
3. After adding style sheet css is applied to that of the xml document and it rendered with applied css font color to the title and text size is increased of the coordinator.
4. A. Added background color for approvalDate  
B. Added Display:block for title to get in new line.
5. Added Comment - <!-- -->
6. Added DTD
7. XML Prolog is the component added in the beginning of an XML document. Otherwise, we can say that whatever it appears before the document's root element can be considered as Prolog. XML Prolog includes XML declaration, DOCTYPE and comments, processing instructions too.

Document\_body contains the document's contents in hierarchical tree structure.

Epilog is optional and contains any final comments or processing instruction.



Information Technology-Mobile Programmer

2019-01-12 2019-09-01 Janis Wu

Information Technology-Software Programmer

2017-12-12 2018-09-01 Taylor Wapner

Information Technology-Web Programmer/Analyst

2017-12-12 2018-09-01 Christiana Sanchez

Ans 2 )

- a) courses.xml
- b) Courses.css

Semester 1
Operating System
ITC 5101
Operating Systems is a course designed to give the user knowledge of one of the most popular and powerful operating systems used today. In this course, the student will learn how to create shell script programs and how to control and manipulate the user environment.
Monday 3 pm
Java Programming 1
ITC 5102
In this introductory programming course, students learn the programming fundamentals that must be acquired for any programming language. Emphasis is placed on the fundamentals of programming. Java is the language used to learn these concepts. Introductory programming applications will be built, tested and debugged to practise these fundamental logical structures (sequences, decisions and loops).
Tuesday 3 pm
Semester 2
Java 2
ITC 5201
This course continues the study of object-oriented programming concepts begun in Java Programming 1 and also introduces many of the most important libraries and classes.
Wednesday 3 pm
XML
ITC 5202
This course is an introduction to Extensible Markup Language (XML). This major technology is platform independent and versatile.
Thursday 3 pm

Ans 3 )

Q. Explain what is a well-formed xml document and what is a valid xml document.

A. XML that adheres to the Xml Standard is considered well formed while xml that adheres to a DTD is considered valid. Well formed XML is XML that has all tags closed in the proper order and, if it has a declaration, it has it first thing in the file with the proper attributes. In other words, validity refers to semantics, well-formedness refers to syntax.

Q. Can we say a valid xml document is also well-formed? Why?

A. Valid XML files are well-formed files which have a Document Type Definition (DTD) or Schema and which conform to it.

Q. How do you check whether Q1 .XML is valid?

A. The root element of the document must be the one mentioned in DTD.

A document should not contain arbitrary tags, while a well-formed document might contain arbitrary tags.

Any tags used in document must be declared in DTD and must be used in the way permitted by DTD.

A validating parser reads DTD and checks the document for the validity. If it finds an error, it reports the same.

Screenshot of VS code having xml extension enabled.

assignment1 > Q1.xml > DOCTYPE:degrees > degrees

```
1  <?xml version="1.0" encoding="UTF-8"?>
2  <?xml-stylesheet type="text/css" href="style.css" ?
3  <!DOCTYPE degrees [
4  <!ELEMENT degrees (degree+)>
5  <!ELEMENT degree (title,approvalDate,effectiveDate,
6  <!ELEMENT title (#PCDATA)>
7  <!ELEMENT approvalDate (#PCDATA)>
8  <!ELEMENT effectiveDate (#PCDATA)>
9  <!ELEMENT coordinator (#PCDATA)>
10 ]>
11 <degrees>
12   <degree>
13     <title>Information Technology-Mobile Programm
14     <approvalDate>2019-01-12</approvalDate>
15     <effectiveDate>2019-09-01</effectiveDate>
16     <coordinator>Janis Wu</coordinator>
17   </degree>
18
19   <degree>
20     <title>Information Technology-Software Progra
21     <approvalDate>2017-12-12</approvalDate>
22     <effectiveDate>2018-09-01</effectiveDate>
23     <coordinator>Taylor Wapner</coordinator>
24   </degree>
```