

1.) DTD A used for t1.xml and t2.xml (was inserted directly in the files):

```
<!DOCTYPE Proj3 [  
  <!ELEMENT Proj3 (student+)>  
  <!ELEMENT student (course+)>  
  <!ATTLIST student name CDATA #REQUIRED>  
  <!ELEMENT course (name, grade)>  
  <!ELEMENT name (#PCDATA)>  
  <!ELEMENT grade (#PCDATA)>  
>
```

2.) www.xmlvalidation.com reported: **No errors were found**

4) 3a. testing in t1.xml:

```
<res>Scarlet Overkill, 4</res>
```

```
<res>Gru, 3.4</res>
```

```
<res>Dru, 3.2</res>
```

testing in t2.xml:

```
<res>Scarlet Overkill, 4</res>
```

```
<res>Gru, 3.4</res>
```

```
<res>Dru, 3.2</res>
```

3b. testing in t1.xml:

```
<Courses>
```

```
  <res>CSE462, 3.5333333333333337</res>
```

```
  </Courses>
```

```
  <Courses>
```

```
    <res>CSE486, 3.0333333333333337</res>
```

```
    </Courses>
```

```
  <Courses/>
```

```
  <Courses>
```

```
    <res>CSE250, 3.4</res>
```

```
    </Courses>
```

```
  <Courses>
```

```
    <res>CSE479, 3</res>
```

```
</Courses>
```

testing in t2.xml:

<Courses>

<res>CSE462, 3.325</res>

</Courses>

<Courses>

<res>CSE486, 3.0666666666666664</res>

</Courses>

<Courses/>

<Courses>

<res>CSE250, 4</res>

</Courses>

<Courses/>