

## DTD Validation

### XML Code:

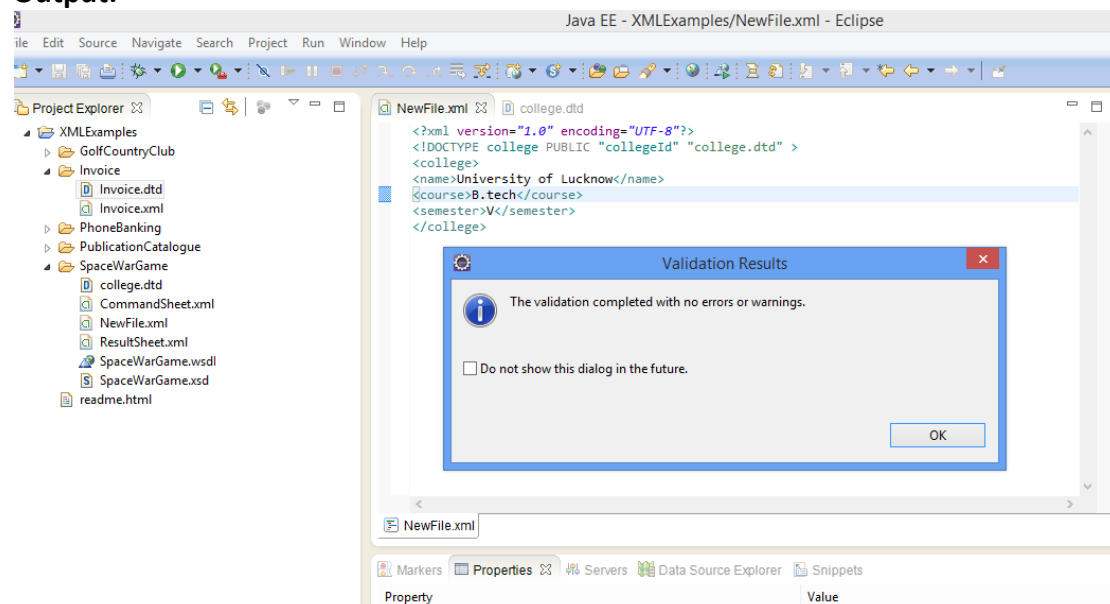
```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE college PUBLIC "collegeId" "college.dtd">
<college>
  <name>University of Lucknow</name>
  <course>B.tech</course>
  <semester>V</semester>
</college>
```

### DTD file

#### Code:

```
<!ELEMENT college (name,course,semester)>
<!ELEMENT name (#PCDATA)>
<!ELEMENT course (#PCDATA)>
<!ELEMENT semester (#PCDATA)>
```

### Output:



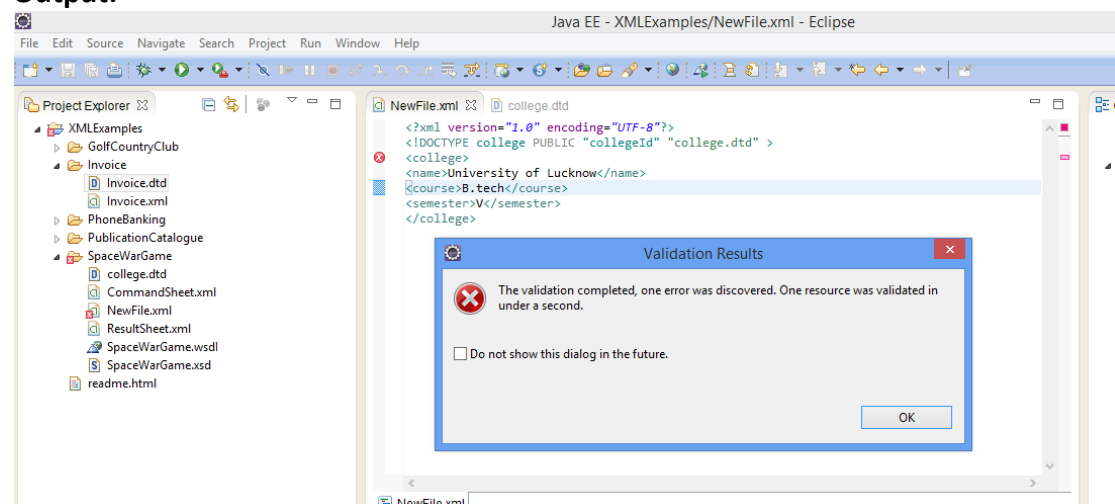
### XML code:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE college PUBLIC "collegeId" "college.dtd">
<college>
<name>University of Lucknow</name>
<course>B.tech</course>
<semester>V</semester>
</college>
```

### DTD file code:

```
<!ELEMENT college (name,semester)>
<!ELEMENT name (#PCDATA)>
<!ELEMENT course (#PCDATA)>
<!ELEMENT semester (#PCDATA)>
```

### Output:



### Validation for Multiple child elements

#### XML code:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE college PUBLIC "collegeId" "college.dtd" >
<college>
```

```

<name a="3">University of Lucknow</name>
<course>B.tech</course>
<course>B.tech</course>
<semester>V</semester>
<semester>V</semester>
</college>

```

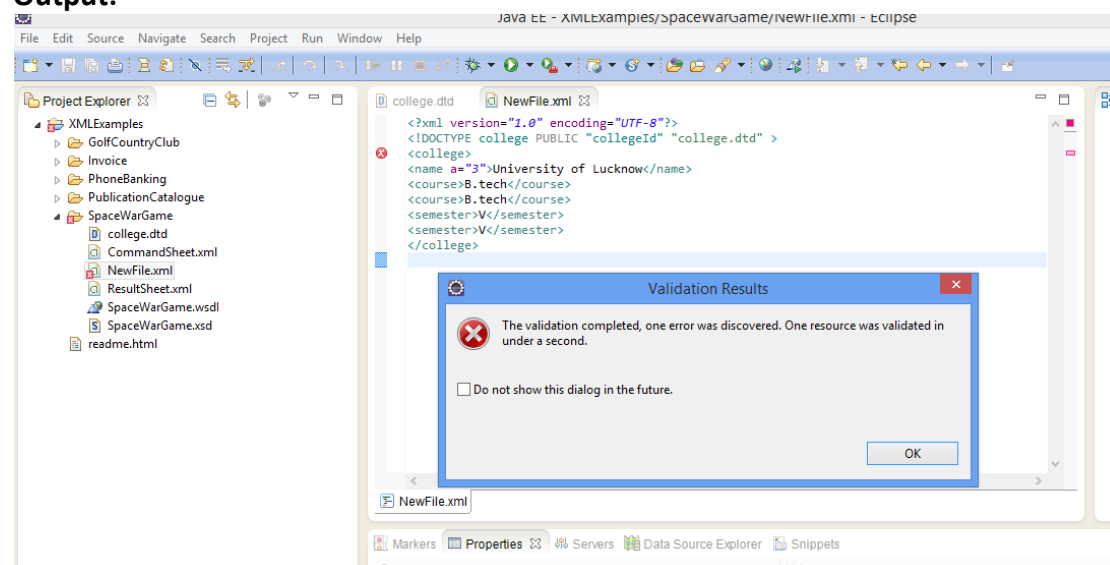
### DTD file code

```

<!ELEMENT college (name,course,semester+)>
<!ELEMENT name (#PCDATA)>
<!ELEMENT course (#PCDATA)>
<!ELEMENT semester (#PCDATA)>

```

### Output:



### XML code:

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE college PUBLIC "collegeId" "college.dtd" >
<college>
<name a="7">University of Lucknow</name>
<course>B.tech</course>
<semester>V</semester>
<semester>V</semester>

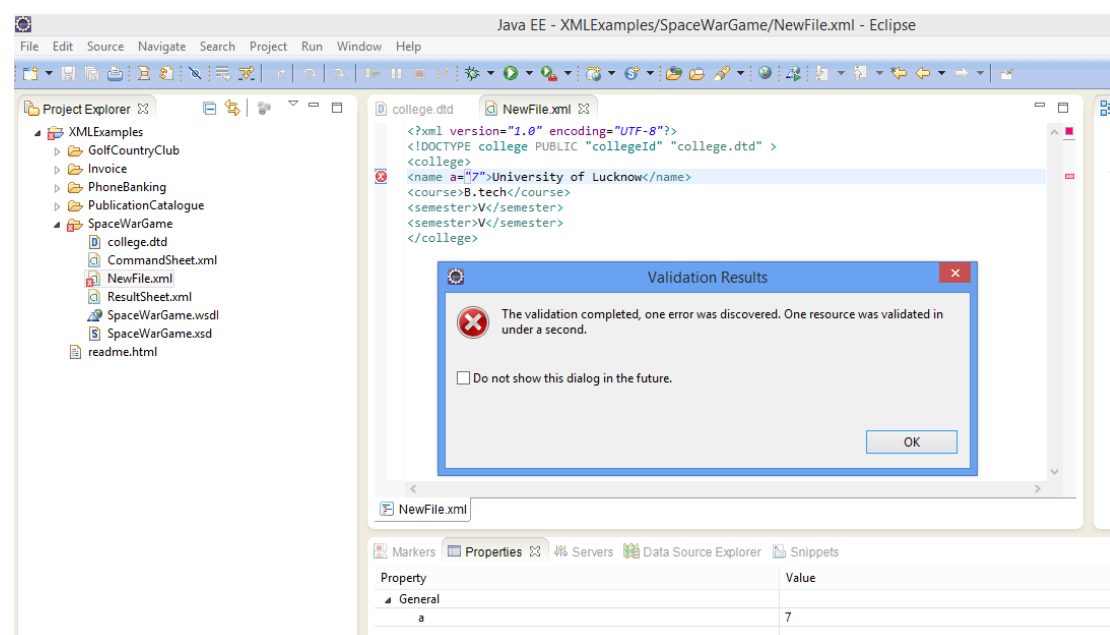
```

</college>

### DTD file code:

```
<!ELEMENT college (name,course,semester+)>
<!ELEMENT name (#PCDATA)>
<!ELEMENT course (#PCDATA)>
<!ELEMENT semester (#PCDATA)>
<!ATTLIST name a (3 | 4 | 5) "3">
```

### Output:



### Attribute required validation

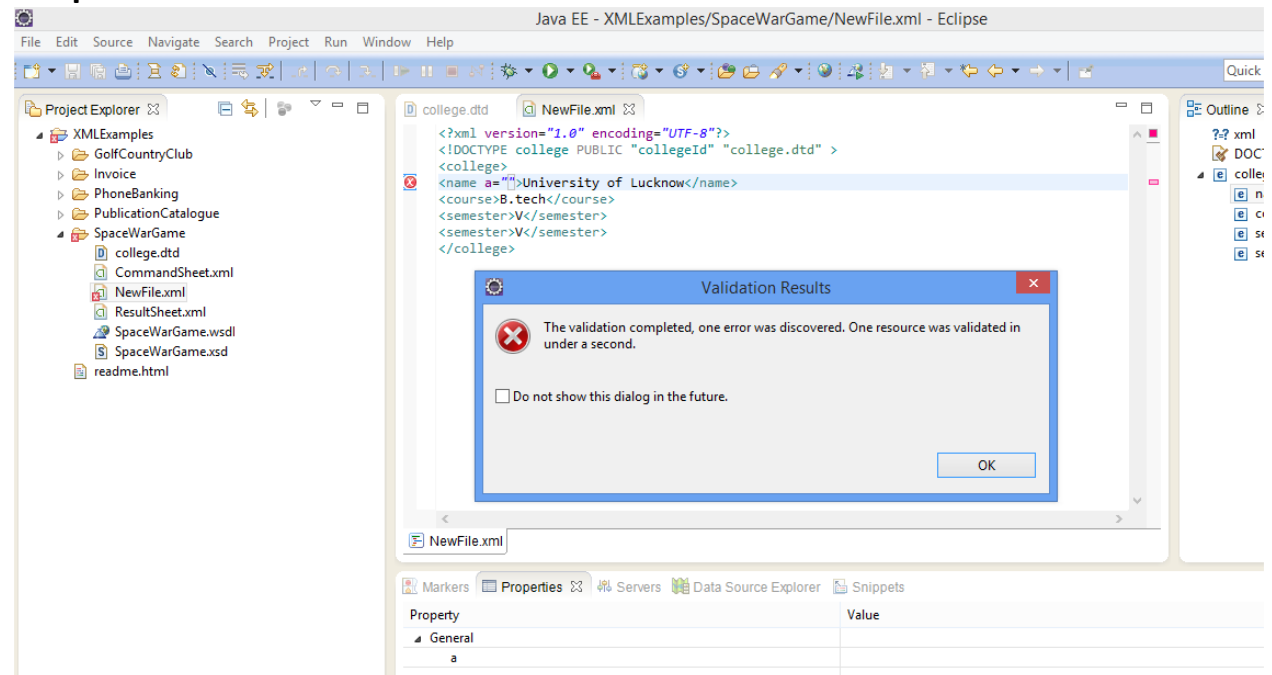
#### XML code:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE college PUBLIC "collegeId" "college.dtd" >
<college>
  <name a="">University of Lucknow</name>
  <course>B.tech</course>
  <semester>V</semester>
  <semester>V</semester>
</college>
```

## DTD file code

```
<!ELEMENT college (name,course,semester+)>
<!ELEMENT name (#PCDATA)>
<!ELEMENT course (#PCDATA)>
<!ELEMENT semester (#PCDATA)>
<!ATTLIST name a (3 | 4 | 5) #REQUIRED>
```

## Output:



## Order of child element validation

### XML code:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE college PUBLIC "collegeld" "college.dtd" >
<college>
  <semester>V</semester>
  <name a="3">University of Lucknow</name>
  <course>B.tech</course>
</college>
```

### DTD file code:

```
<!ELEMENT college ((name,course,semester)|(course,semester,name))>
<!ELEMENT name (#PCDATA)>
<!ELEMENT course (#PCDATA)>
<!ELEMENT semester (#PCDATA)>
<!ATTLIST name a (3 | 4 | 5) #REQUIRED>
```

### Output:

