

Lab 3 Report

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Submitted To: Prof. Mohammad Shamas

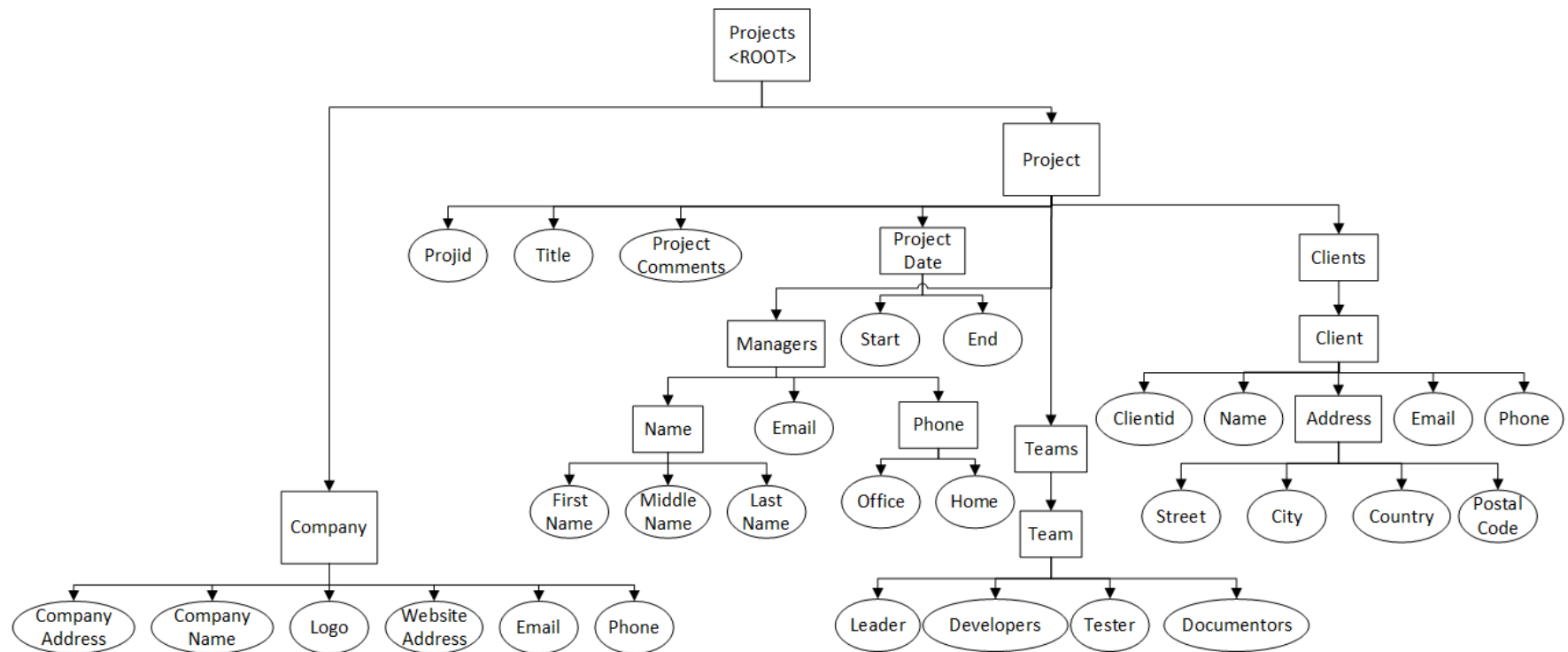
Course Code: MODE-4201

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XML Tree Diagram



DTD File Contents

<!ELEMENT projects (company, project+)>

<!ELEMENT company (companyName, companyAddress, companyLogo, website?, email, phone+)>

<!ELEMENT companyName (#PCDATA)>

<!ELEMENT companyAddress (#PCDATA)>

<!ELEMENT companyLogo (#PCDATA)>

<!ELEMENT website (#PCDATA)>

<!ELEMENT email (#PCDATA)>

<!ELEMENT phone (#PCDATA)>

<!ELEMENT project (title, comments, projectDate, managers, teams, clients?)>

<!ATTLIST project projId ID #REQUIRED>

<!ELEMENT title (#PCDATA)>

<!ELEMENT comments (#PCDATA)>

<!ELEMENT projectDate EMPTY>

<!ATTLIST projectDate start CDATA #REQUIRED>

<!ATTLIST projectDate end CDATA #REQUIRED>

<!ELEMENT managers (manager+)>

<!ELEMENT manager (name, managerPhone, email*)>

<!ELEMENT name (firstName, middleName?, lastName)>

<!ELEMENT firstName (#PCDATA)>

<!ELEMENT middleName (#PCDATA)>

<!ELEMENT lastName (#PCDATA)>

<!ELEMENT managerPhone EMPTY>

<!ATTLIST managerPhone office CDATA #IMPLIED>

<!ATTLIST managerPhone home CDATA #IMPLIED>

<!ELEMENT teams (team+)>

<!ELEMENT team (leader, developer+, tester?, documentor*)>

<!ELEMENT leader (#PCDATA)>

<!ELEMENT developer (#PCDATA)>

<!ELEMENT tester (#PCDATA)>

<!ELEMENT documentor (#PCDATA)>

<!ELEMENT clients (client*)>

<!ELEMENT client (clientName, address, email, phone)>

<!ATTLIST client clientId ID #REQUIRED>

<!ELEMENT clientName (#PCDATA)>

<!ELEMENT address (street?, city, country, postalCode?)>

<!ELEMENT street (#PCDATA)>

<!ELEMENT city (#PCDATA)>

<!ELEMENT country (#PCDATA)>

<!ELEMENT postalCode (#PCDATA)>

XML File Contents

<?xml version="1.0" encoding="utf-8"?>

<!DOCTYPE projects SYSTEM "projects.dtd">

<projects>

 <company>

 <companyName>Company 1</companyName>

 <companyAddress>123 Apple St.</companyAddress>

 <companyLogo>company1_logo.png</companyLogo>

 <website>www.company1.com</website>

 <email>representative@company1.com</email>

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        <phone>905-222-1234</phone>
        <phone>416-222-1234</phone>
    </company>
    <project projId="P01">
        <title>project title</title>
        <comments>these are the comments</comments>
        <projectDate start="2022-01-01" end="2022-12-25"/>
        <managers>
            <manager>
                <name>
                    <firstName>John</firstName>
                    <middleName>A.</middleName>
                    <lastName>Doe</lastName>
                </name>
                <managerPhone office="111-222-3334" home="123-456-7890" />
                <email>john@company1.com</email>
            </manager>
        </managers>
        <teams>
            <team>
                <leader>John C. Reily</leader>
                <developer>Devon Baker</developer>
                <tester>Tessa Blake</tester>
                <documentor>Andrew Taylor</documentor>
            </team>
        </teams>
        <clients>
            <client clientId="C01">
                <clientName>Client 1</clientName>
            </client>
        </clients>
    </project>

```

```

        <address>
            <street>1 Bloor St.</street>
            <city>Toronto</city>
            <country>Canada</country>
            <postalCode>A1A 1A1</postalCode>
        </address>
        <email>client1@gmail.com</email>
        <phone>416-222-3344</phone>
    </client>
</clients>
</project>
<project projId="P02">
    <title>project title</title>
    <comments>these are the comments</comments>
    <projectDate start="2022-02-01" end="2023-02-01"/>
    <managers>
        <manager>
            <name>
                <firstName>Jane</firstName>
                <lastName>Doe</lastName>
            </name>
            <managerPhone office="111-222-3334" home="123-456-7890" />
        </manager>
    </managers>
    <teams>
        <team>
            <leader>John C. Reily</leader>
            <developer>Devon Baker</developer>
            <developer>Cody Jackson</developer>

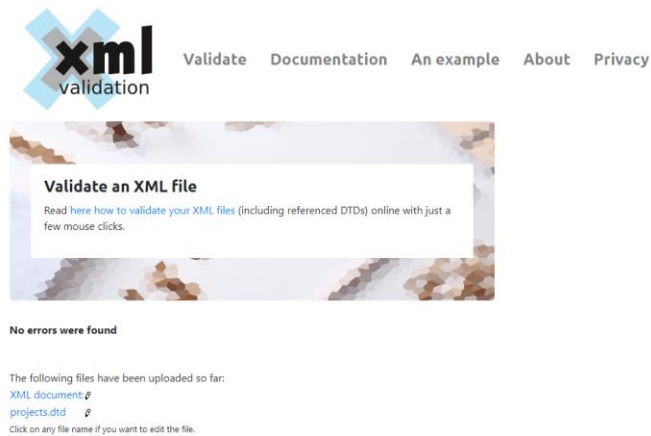
```

```

        </team>
    </teams>
    <clients>
        <client clientId="C02">
            <clientName>Client 2</clientName>
            <address>
                <city>Toronto</city>
                <country>Canada</country>
            </address>
            <email>client2@gmail.com</email>
            <phone>905-999-8887</phone>
        </client>
    </clients>
</project>
</projects>

```

XML Validation



References

https://www.w3schools.com/xml/xml_dtd_intro.asp

https://www.w3schools.com/xml/xml_dtd_building.asp
https://www.w3schools.com/xml/xml_dtd_elements.asp
https://www.w3schools.com/xml/xml_dtd_attributes.asp
https://www.w3schools.com/xml/xml_dtd_el_vs_attr.asp
https://www.w3schools.com/xml/xml_dtd_examples.asp