

Lab 3: XML and Related Technologies

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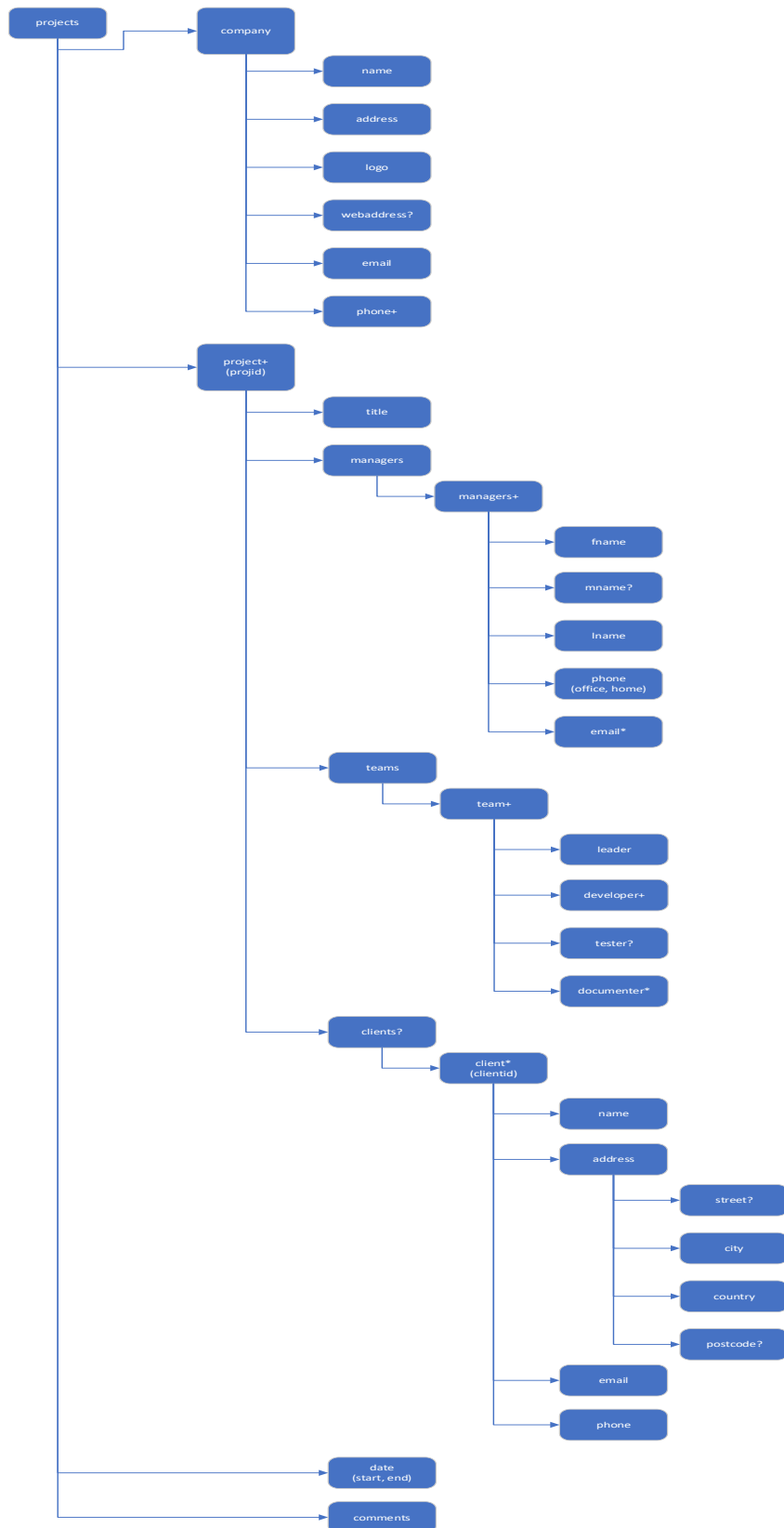
MODE 4201



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XML Diagram



DTD

```
<!ELEMENT projects (company, project+)>
<!ELEMENT company (com_name, com_address, logo, webaddress?, com_email, com_phone)>
<!ELEMENT com_name (#PCDATA)>
<!ELEMENT com_address (#PCDATA)>
<!ELEMENT logo (#PCDATA)>
<!ELEMENT webaddress (#PCDATA)>
<!ELEMENT com_email (#PCDATA)>
<!ELEMENT com_phone (#PCDATA)>
<!ATTLIST project projid ID #REQUIRED>
<!ELEMENT project (title, managers, teams, clients?, date, comments)>
<!ELEMENT title (#PCDATA)>
<!ELEMENT managers (manager+)>
<!ELEMENT manager (fname, mname?, lname, man_phone, man_email*)>
<!ELEMENT fname (#PCDATA)>
<!ELEMENT mname (#PCDATA)>
<!ELEMENT lname (#PCDATA)>
<!ELEMENT man_phone EMPTY>
<!ATTLIST man_phone
    office CDATA #REQUIRED
    home CDATA #REQUIRED
>
<!ELEMENT man_email (#PCDATA)>
<!ELEMENT teams (team+)>
<!ELEMENT team (leader, developer+, tester?, documenter*)>
<!ELEMENT leader (#PCDATA)>
<!ELEMENT developer (#PCDATA)>
<!ELEMENT tester (#PCDATA)>
<!ELEMENT documenter (#PCDATA)>
<!ELEMENT clients (client*)>
<!ATTLIST client clientid ID #REQUIRED>
<!ELEMENT client (cli_name, cli_address, cli_email, cli_phone)>
<!ELEMENT cli_name (#PCDATA)>
<!ELEMENT cli_address (street?, city, country, postcode?)>
<!ELEMENT street (#PCDATA)>
<!ELEMENT city (#PCDATA)>
<!ELEMENT country (#PCDATA)>
<!ELEMENT postcode (#PCDATA)>
<!ELEMENT cli_email (#PCDATA)>
<!ELEMENT cli_phone (#PCDATA)>
<!ELEMENT date EMPTY>
<!ATTLIST date
    start CDATA #REQUIRED
    end CDATA #REQUIRED
>
<!ELEMENT comments (#PCDATA)>
```

XML Document

```
<?xml version="1.0" encoding = "utf-8"?>
<!DOCTYPE projects SYSTEM "projects.dtd">
<projects>
    <company>
        <com_name>TyINC</com_name>
        <com_address>4 Third Street</com_address>
        <logo>logo.jpg</logo>
        <webaddress>www.TyINC.ca</webaddress>
        <com_email>TyINC@gmail.com</com_email>
        <com_phone>9054368924</com_phone>
    </company>
    <project projid = "P01">
        <title>Mobile Paint App</title>
        <managers>
            <manager>
                <fname>Tim</fname>
                <mname>Todd</mname>
                <lname>Tanner</lname>
                <man_phone home="9053465751"
office="6473045751"></man_phone>
                <man_email>TTT@gmail.ca</man_email>
            </manager>
        </managers>
        <teams>
            <team>
                <leader>Billy Bob</leader>
                <developer>Shirley Cane</developer>
                <tester>Franky Jim</tester>
                <documenter>Doc Taylor</documenter>
            </team>
        </teams>
    </project>
</projects>
```

```

        </team>

    </teams>

    <clients>

        <client clientid = "C01">

            <cli_name>Apple</cli_name>

            <cli_address>

                <street>234 First Street</street>

                <city>Miami</city>

                <country>USA</country>

                <postcode>L1J6J3</postcode>

            </cli_address>

            <cli_email>apple@bing.com</cli_email>

            <cli_phone>9056463248</cli_phone>

        </client>

    </clients>

    <date start="10/15/22" end="10/31/22"></date>

    <comments>Bill needs to pick up the slack</comments>

</project>

<project projid = "P02">

    <title>Banking App</title>

    <managers>

        <manager>

            <fname>Kent</fname>

            <lname>Kerry</lname>

            <man_phone office ="9053542507" home

=<man_phone>

            <man_email>KKerry@gmail.ca</man_email>

```

```
        </manager>
    </managers>
    <teams>
        <team>
            <leader>Blake Shelf</leader>
            <developer>Sam Snail</developer>
            <tester>Franky Jim</tester>
            <documenter>Doc Taylor</documenter>

        </team>

    </teams>
    <date start="10/27/22" end="11/15/22"></date>
    <comments>Everything is broken</comments>
</project>

</projects>
```

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE projects SYSTEM "projects.dtd">
- <projects>
  - <company>
    <com_name>TyINC</com_name>
    <com_address>4 Third Street</com_address>
    <logo>logo.jpg</logo>
    <webaddress>www.TyINC.ca</webaddress>
    <com_email>TyINC@gmail.com</com_email>
    <com_phone>9054368924</com_phone>
  </company>
  - <project projid="P01">
    <title>Mobile Paint App</title>
    - <managers>
      - <manager>
        <fname>Tim</fname>
        <mname>Todd</mname>
        <lname>Tanner</lname>
        <man_phone office="6473045751" home="9053465751"/>
        <man_email>TTT@gmail.ca</man_email>
      </manager>
    </managers>
    - <teams>
      - <team>
        <leader>Billy Bob</leader>
        <developer>Shirley Cane</developer>
        <tester>Franky Jim</tester>
        <documenter>Doc Taylor</documenter>
      </team>
    </teams>
    - <clients>
      - <client clientid="C01">
        <cli_name>Apple</cli_name>
        - <cli_address>
          <street>234 First Street</street>
          <city>Miami</city>
          <country>USA</country>
          <postcode>L1J6J3</postcode>
        </cli_address>
        <cli_email>apple@bing.com</cli_email>
        <cli_phone>9056463248</cli_phone>
      </client>
    </clients>
    <date end="10/31/22" start="10/15/22"/>
    <comments>Bill needs to pick up the slack</comments>
  </project>
  - <project projid="P02">
    <title>Banking App</title>
    - <managers>
      - <manager>
        <fname>Kent</fname>
        <lname>Kerry</lname>
        <man_phone office="9053542507" home="9053252157"/>
        <man_email>KKerry@gmail.ca</man_email>
      </manager>
    </managers>
    - <teams>
      - <team>
        <leader>Blake Shelf</leader>
        <developer>Sam Snail</developer>
        <tester>Franky Jim</tester>
        <documenter>Doc Taylor</documenter>
      </team>
    </teams>
    <date end="11/15/22" start="10/27/22"/>
    <comments>Everything is broken</comments>
  </project>
</projects>

```


No errors were found

The following files have been uploaded so far

[XML document:](#) 

[projects.dtd](#) 

Click on any file name if you want to edit the file.