1. **Employees.xml**

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

<?xml-stylesheet type="text/xsl" href="./Employees.xsl"?>

<employees>

  <employee id="E101">

    <name>Arjun Sharma</name>

    <department>IT</department>

    <designation>Frontend Developer</designation>

    <salary>72000</salary>

    <hiredate>2023-06-15</hiredate>

    <projects>

      <project>UI Redesign</project>

      <project>Landing Page</project>

    </projects>

  </employee>

  <employee id="E102">

    <name>Ravi Kulkarni</name>

    <department>IT</department>

    <designation>Backend Developer</designation>

    <salary>75000</salary>

    <hiredate>2022-11-10</hiredate>

    <projects>

      <project>API Integration</project>

    </projects>

  </employee>

  <employee id="E103">

    <name>Manoj Patil</name>

    <department>IT</department>

    <designation>DevOps Engineer</designation>

    <salary>79000</salary>

    <hiredate>2023-01-20</hiredate>

    <projects>

      <project>CI/CD Setup</project>

    </projects>

  </employee>

  <employee id="E104">

    <name>Sachin Rane</name>

    <department>IT</department>

    <designation>System Administrator</designation>

    <salary>68000</salary>

    <hiredate>2021-12-05</hiredate>

    <projects>

      <project>Server Maintenance</project>

    </projects>

  </employee>

  <employee id="E105">

    <name>Vivek Desai</name>

    <department>IT</department>

    <designation>QA Tester</designation>

    <salary>62000</salary>

    <hiredate>2022-03-17</hiredate>

    <projects>

      <project>Automation Scripts</project>

      <project>Bug Reporting</project>

    </projects>

  </employee>

  <employee id="E106">

    <name>Kunal Joshi</name>

    <department>IT</department>

    <designation>Software Engineer</designation>

    <salary>70000</salary>

    <hiredate>2023-09-12</hiredate>

    <projects>

      <project>Core Module</project>

    </projects>

  </employee>

  <employee id="E107">

    <name>Rahul Kapoor</name>

    <department>IT</department>

    <designation>Technical Lead</designation>

    <salary>85000</salary>

    <hiredate>2020-08-08</hiredate>

    <projects>

      <project>Team Management</project>

    </projects>

  </employee>

  <employee id="E108">

    <name>Amit Reddy</name>

    <department>IT</department>

    <designation>Database Administrator</designation>

    <salary>74000</salary>

    <hiredate>2021-04-25</hiredate>

    <projects>

      <project>Data Backup</project>

    </projects>

  </employee>

  <employee id="E109">

    <name>Nikhil Verma</name>

    <department>IT</department>

    <designation>Cloud Engineer</designation>

    <salary>78000</salary>

    <hiredate>2022-10-03</hiredate>

    <projects>

      <project>AWS Migration</project>

    </projects>

  </employee>

  <employee id="E110">

    <name>Rajesh Pawar</name>

    <department>IT</department>

    <designation>Data Analyst</designation>

    <salary>76000</salary>

    <hiredate>2023-02-14</hiredate>

    <projects>

      <project>Data Visualization</project>

    </projects>

  </employee>

  <employee id="E111">

    <name>Sandeep Chavan</name>

    <department>IT</department>

    <designation>AI/ML Engineer</designation>

    <salary>88000</salary>

    <hiredate>2021-07-30</hiredate>

    <projects>

      <project>Model Training</project>

    </projects>

  </employee>

  <employee id="E112">

    <name>Pranav Naik</name>

    <department>IT</department>

    <designation>Cybersecurity Specialist</designation>

    <salary>82000</salary>

    <hiredate>2022-05-05</hiredate>

    <projects>

      <project>Security Audit</project>

      <project>Penetration Testing</project>

    </projects>

  </employee>

</employees>

1. **Employees.dtd**

<!ELEMENT employees (employee+)>

<!ELEMENT employee (name, department, designation, salary, hiredate, projects)>

<!ATTLIST employee id ID #REQUIRED>

<!ELEMENT name (#PCDATA)>

<!ELEMENT department (#PCDATA)>

<!ELEMENT designation (#PCDATA)>

<!ELEMENT salary (#PCDATA)>

<!ELEMENT hiredate (#PCDATA)>

<!ELEMENT projects (project+)>

<!ELEMENT project (#PCDATA)>

1. **Employees.xsd**

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

<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">

  <xs:element name="employees">

    <xs:complexType>

      <xs:sequence>

        <xs:element name="employee" maxOccurs="unbounded">

          <xs:complexType>

            <xs:sequence>

              <xs:element name="name" type="xs:string"/>

              <xs:element name="department" type="xs:string"/>

              <xs:element name="designation" type="xs:string"/>

              <xs:element name="salary" type="xs:decimal"/>

              <xs:element name="hiredate" type="xs:date"/>

              <xs:element name="projects">

                <xs:complexType>

                  <xs:sequence>

                    <xs:element name="project" type="xs:string" maxOccurs="unbounded"/>

                  </xs:sequence>

                </xs:complexType>

              </xs:element>

            </xs:sequence>

            <xs:attribute name="id" type="xs:string" use="required"/>

          </xs:complexType>

        </xs:element>

      </xs:sequence>

    </xs:complexType>

  </xs:element>

</xs:schema>

1. **Employees.xsl**

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

<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">

  <xsl:output method="html" encoding="UTF-8"/>

  <xsl:template match="/">

    <html>

      <head>

        <title>Employee Cards</title>

        <link rel="stylesheet" href="styles.css" />

      </head>

      <body>

        <h2>Infosys Employee Details</h2>

        <div class="cards-container">

          <xsl:for-each select="employees/employee">

            <xsl:variable name="index" select="position()"/>

            <xsl:variable name="class" select="concat('card', ($index mod 4) + 1)"/>

            <div>

              <xsl:attribute name="class">

                <xsl:value-of select="concat('card ', $class)"/>

              </xsl:attribute>

              <h2>

                <xsl:value-of select="$index"/>. <xsl:value-of select="name"/>

              </h2>

              <p><span class="label">Position:</span> <xsl:value-of select="designation"/></p>

              <p><span class="label">Department:</span> <xsl:value-of select="department"/></p>

              <p><span class="label">Salary:</span> <xsl:value-of select="salary"/></p>

              <p><span class="label">Hired On:</span> <xsl:value-of select="hiredate"/></p>

              <div class="projects">

                <span class="label">Projects:</span>

                <xsl:for-each select="projects/project">

                  <div class="project">

                    <xsl:value-of select="."/>

                  </div>

                </xsl:for-each>

              </div>

            </div>

          </xsl:for-each>

        </div>

      </body>

    </html>

  </xsl:template>

</xsl:stylesheet>

1. **Styles.css**

body {

  font-family: Arial, sans-serif;

  background-color: #f0f2f5;

  margin: 0;

  padding: 20px;

  text-align: center;

}

h2 {

  text-align: center;

  font-size: 30px;

}

.cards-container {

  display: flex;

  justify-content: center;

  flex-wrap: wrap;

  gap: 20px;

}

.card {

  border-radius: 10px;

  box-shadow: 0 4px 12px rgba(0, 0, 0, 0.1);

  padding: 20px;

  width: 300px;

  text-align: left;

  transition: transform 0.3s;

}

.card:hover {

  transform: scale(1.03);

}

.card1 {

  background-color: #ffdddd;

}

.card2 {

  background-color: #ddffdd;

}

.card3 {

  background-color: #ddeeff;

}

.card4 {

  background-color: #fff5cc;

}

.label {

  font-weight: bold;

}

.projects {

  margin-top: 10px;

}

.project {

  background-color: #f9f9f9;

  padding: 8px 10px;

  border-radius: 6px;

  margin-top: 5px;

  font-size: 14px;

}

a {

  color: #0066cc;

  text-decoration: none;

}

a:hover {

  text-decoration: underline;

}

1. **Output**

