**Đề tài 4: Quản lý nhân sự một công ty**

**Nhóm 6**

|  |  |  |
| --- | --- | --- |
| Ký hiệu nhóm: $ |  |  |
| **STT** | **Mã sinh viên** | **Họ và tên** |
| 11 | KTPM2211033 | Nguyễn Minh Quân |
| 23 | KTPM2211041 | Trần Minh Tiến |
| 39 | KTPM2211023 | Nguyễn Triều Vỹ |

1. Mô hình ERD

Hình ERD

A screenshot of a computer

AI-generated content may be incorrect.

1. File XML
   1. Có thể dùng 2 file: 1 dành cho DTD và 1 dành cho XSD
   2. Dữ liệu thực tế, mỗi thực thể chính phải có ít nhất 7 dòng dữ liệu.

Source code XML

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

<!DOCTYPE HE\_THONG\_NHAN\_SU SYSTEM "heThongNhanSu.dtd">

<HE\_THONG\_NHAN\_SU>

    <DS\_BANG\_LUONG>

        <BANG\_LUONG ma\_bl="bl1" ma\_qtlv\_ref\_bl="qtlv1" ma\_cc\_ref\_bl="cc1">

            <thang>9</thang>

            <nam>2025</nam>

            <luong\_co\_ban>9000000</luong\_co\_ban>

            <phu\_cap>1000000</phu\_cap>

            <tien\_tang\_ca>500000</tien\_tang\_ca>

            <tong\_luong>10500000</tong\_luong>

        </BANG\_LUONG>

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            <luong\_co\_ban>10000000</luong\_co\_ban>

            <phu\_cap>800000</phu\_cap>

            <tien\_tang\_ca>300000</tien\_tang\_ca>

            <tong\_luong>11100000</tong\_luong>

        </BANG\_LUONG>

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            <phu\_cap>500000</phu\_cap>

            <tien\_tang\_ca>200000</tien\_tang\_ca>

            <tong\_luong>11700000</tong\_luong>

        </BANG\_LUONG>

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            <phu\_cap>600000</phu\_cap>

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            <phu\_cap>2000000</phu\_cap>

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            <tong\_luong>17600000</tong\_luong>

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            <phu\_cap>200000</phu\_cap>

            <tien\_tang\_ca>100000</tien\_tang\_ca>

            <tong\_luong>5300000</tong\_luong>

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            <tong\_luong>18300000</tong\_luong>

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    </DS\_BANG\_LUONG>

    <DS\_CHAM\_CONG>

        <CHAM\_CONG ma\_cc="cc1" ma\_qtlv\_ref\_cc="qtlv1">

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            <so\_gio\_tang\_ca>5</so\_gio\_tang\_ca>

        </CHAM\_CONG>

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            <so\_gio\_tang\_ca>3</so\_gio\_tang\_ca>

        </CHAM\_CONG>

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            <so\_ngay\_cong>23</so\_ngay\_cong>

            <so\_gio\_tang\_ca>2</so\_gio\_tang\_ca>

        </CHAM\_CONG>

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            <so\_gio\_tang\_ca>4</so\_gio\_tang\_ca>

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            <so\_gio\_tang\_ca>6</so\_gio\_tang\_ca>

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            <so\_gio\_tang\_ca>1</so\_gio\_tang\_ca>

        </CHAM\_CONG>

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            <so\_ngay\_cong>25</so\_ngay\_cong>

            <so\_gio\_tang\_ca>8</so\_gio\_tang\_ca>

        </CHAM\_CONG>

    </DS\_CHAM\_CONG>

    <DS\_CHUC\_VU>

        <CHUC\_VU ma\_cv="cv1">

            <ten\_chuc\_vu>Truong Phong</ten\_chuc\_vu>

            <luong\_co\_ban>15000000</luong\_co\_ban>

        </CHUC\_VU>

        <CHUC\_VU ma\_cv="cv2">

            <ten\_chuc\_vu>Pho Phong</ten\_chuc\_vu>

            <luong\_co\_ban>12000000</luong\_co\_ban>

        </CHUC\_VU>

        <CHUC\_VU ma\_cv="cv3">

            <ten\_chuc\_vu>Chuyen Vien</ten\_chuc\_vu>

            <luong\_co\_ban>10000000</luong\_co\_ban>

        </CHUC\_VU>

        <CHUC\_VU ma\_cv="cv4">

            <ten\_chuc\_vu>Ky Su</ten\_chuc\_vu>

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        </CHUC\_VU>

        <CHUC\_VU ma\_cv="cv5">

            <ten\_chuc\_vu>Ke Toan Vien</ten\_chuc\_vu>

            <luong\_co\_ban>9000000</luong\_co\_ban>

        </CHUC\_VU>

        <CHUC\_VU ma\_cv="cv6">

            <ten\_chuc\_vu>Thuc Tap Sinh</ten\_chuc\_vu>

            <luong\_co\_ban>5000000</luong\_co\_ban>

        </CHUC\_VU>

        <CHUC\_VU ma\_cv="cv7">

            <ten\_chuc\_vu>Truong Du An</ten\_chuc\_vu>

            <luong\_co\_ban>16000000</luong\_co\_ban>

        </CHUC\_VU>

    </DS\_CHUC\_VU>

    <DS\_DU\_AN>

        <DU\_AN ma\_da="da1">

            <ten\_du\_an>He thong quan ly nhan su</ten\_du\_an>

            <ngay\_bat\_dau>2024-01-01</ngay\_bat\_dau>

            <ngay\_ket\_thuc>2024-12-31</ngay\_ket\_thuc>

            <mo\_ta>Phat trien phan mem quan ly nhan su</mo\_ta>

        </DU\_AN>

        <DU\_AN ma\_da="da2">

            <ten\_du\_an>Website ban hang</ten\_du\_an>

            <ngay\_bat\_dau>2024-02-15</ngay\_bat\_dau>

            <ngay\_ket\_thuc>2024-08-15</ngay\_ket\_thuc>

            <mo\_ta>Xay dung website thuong mai dien tu</mo\_ta>

        </DU\_AN>

        <DU\_AN ma\_da="da3">

            <ten\_du\_an>He thong CRM</ten\_du\_an>

            <ngay\_bat\_dau>2024-03-10</ngay\_bat\_dau>

            <ngay\_ket\_thuc>2024-11-30</ngay\_ket\_thuc>

            <mo\_ta>Quan ly khach hang</mo\_ta>

        </DU\_AN>

        <DU\_AN ma\_da="da4">

            <ten\_du\_an>App di dong</ten\_du\_an>

            <ngay\_bat\_dau>2024-05-01</ngay\_bat\_dau>

            <ngay\_ket\_thuc>2024-10-30</ngay\_ket\_thuc>

            <mo\_ta>Phat trien ung dung mobile</mo\_ta>

        </DU\_AN>

        <DU\_AN ma\_da="da5">

            <ten\_du\_an>He thong ERP</ten\_du\_an>

            <ngay\_bat\_dau>2024-06-01</ngay\_bat\_dau>

            <ngay\_ket\_thuc>2025-01-31</ngay\_ket\_thuc>

            <mo\_ta>Tich hop quan ly doanh nghiep</mo\_ta>

        </DU\_AN>

        <DU\_AN ma\_da="da6">

            <ten\_du\_an>Phan mem ke toan</ten\_du\_an>

            <ngay\_bat\_dau>2024-04-01</ngay\_bat\_dau>

            <ngay\_ket\_thuc>2024-09-30</ngay\_ket\_thuc>

            <mo\_ta>Ke toan noi bo</mo\_ta>

        </DU\_AN>

        <DU\_AN ma\_da="da7">

            <ten\_du\_an>Phan mem cham cong</ten\_du\_an>

            <ngay\_bat\_dau>2024-07-01</ngay\_bat\_dau>

            <ngay\_ket\_thuc>2024-12-31</ngay\_ket\_thuc>

            <mo\_ta>Tu dong hoa cham cong</mo\_ta>

        </DU\_AN>

    </DS\_DU\_AN>

    <DS\_NHAN\_VIEN>

        <NHAN\_VIEN ma\_nv="nv1">

            <ho\_ten>Nguyen Van A</ho\_ten>

            <ngay\_sinh>1990-05-20</ngay\_sinh>

            <gioi\_tinh>Nam</gioi\_tinh>

            <dia\_chi>Ha Noi</dia\_chi>

            <so\_dien\_thoai>0901111111</so\_dien\_thoai>

            <email>vana@example.com</email>

        </NHAN\_VIEN>

        <NHAN\_VIEN ma\_nv="nv2">

            <ho\_ten>Tran Thi B</ho\_ten>

            <ngay\_sinh>1992-03-15</ngay\_sinh>

            <gioi\_tinh>Nu</gioi\_tinh>

            <dia\_chi>Hai Phong</dia\_chi>

            <so\_dien\_thoai>0902222222</so\_dien\_thoai>

            <email>thib@example.com</email>

        </NHAN\_VIEN>

        <NHAN\_VIEN ma\_nv="nv3">

            <ho\_ten>Le Van C</ho\_ten>

            <ngay\_sinh>1995-10-05</ngay\_sinh>

            <gioi\_tinh>Nam</gioi\_tinh>

            <dia\_chi>Da Nang</dia\_chi>

            <so\_dien\_thoai>0903333333</so\_dien\_thoai>

            <email>vanc@example.com</email>

        </NHAN\_VIEN>

        <NHAN\_VIEN ma\_nv="nv4">

            <ho\_ten>Pham Thi D</ho\_ten>

            <ngay\_sinh>1998-07-22</ngay\_sinh>

            <gioi\_tinh>Nu</gioi\_tinh>

            <dia\_chi>Hue</dia\_chi>

            <so\_dien\_thoai>0904444444</so\_dien\_thoai>

            <email>thid@example.com</email>

        </NHAN\_VIEN>

        <NHAN\_VIEN ma\_nv="nv5">

            <ho\_ten>Hoang Van E</ho\_ten>

            <ngay\_sinh>1991-12-11</ngay\_sinh>

            <gioi\_tinh>Nam</gioi\_tinh>

            <dia\_chi>Ha Noi</dia\_chi>

            <so\_dien\_thoai>0905555555</so\_dien\_thoai>

            <email>vane@example.com</email>

        </NHAN\_VIEN>

        <NHAN\_VIEN ma\_nv="nv6">

            <ho\_ten>Dang Thi F</ho\_ten>

            <ngay\_sinh>1994-09-01</ngay\_sinh>

            <gioi\_tinh>Nu</gioi\_tinh>

            <dia\_chi>TP Ho Chi Minh</dia\_chi>

            <so\_dien\_thoai>0906666666</so\_dien\_thoai>

            <email>thif@example.com</email>

        </NHAN\_VIEN>

        <NHAN\_VIEN ma\_nv="nv7">

            <ho\_ten>Vu Van G</ho\_ten>

            <ngay\_sinh>1996-11-30</ngay\_sinh>

            <gioi\_tinh>Nam</gioi\_tinh>

            <dia\_chi>Ha Noi</dia\_chi>

            <so\_dien\_thoai>0907777777</so\_dien\_thoai>

            <email>vang@example.com</email>

        </NHAN\_VIEN>

    </DS\_NHAN\_VIEN>

    <DS\_PHONG\_BAN>

        <PHONG\_BAN ma\_pb="pb1">

            <ten\_phong\_ban>Ke Toan</ten\_phong\_ban>

            <dia\_chi>Ha Noi</dia\_chi>

            <so\_dien\_thoai>0241111111</so\_dien\_thoai>

        </PHONG\_BAN>

        <PHONG\_BAN ma\_pb="pb2">

            <ten\_phong\_ban>Nhan Su</ten\_phong\_ban>

            <dia\_chi>Hai Phong</dia\_chi>

            <so\_dien\_thoai>0242222222</so\_dien\_thoai>

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            <ten\_phong\_ban>Ky Thuat</ten\_phong\_ban>

            <dia\_chi>Da Nang</dia\_chi>

            <so\_dien\_thoai>0243333333</so\_dien\_thoai>

        </PHONG\_BAN>

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            <ten\_phong\_ban>Kinh Doanh</ten\_phong\_ban>

            <dia\_chi>Ha Noi</dia\_chi>

            <so\_dien\_thoai>0244444444</so\_dien\_thoai>

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        <PHONG\_BAN ma\_pb="pb5">

            <ten\_phong\_ban>Marketing</ten\_phong\_ban>

            <dia\_chi>TP Ho Chi Minh</dia\_chi>

            <so\_dien\_thoai>0245555555</so\_dien\_thoai>

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            <ten\_phong\_ban>Ban Giam Doc</ten\_phong\_ban>

            <dia\_chi>Ha Noi</dia\_chi>

            <so\_dien\_thoai>0246666666</so\_dien\_thoai>

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        <PHONG\_BAN ma\_pb="pb7">

            <ten\_phong\_ban>Ho Tro Khach Hang</ten\_phong\_ban>

            <dia\_chi>Hue</dia\_chi>

            <so\_dien\_thoai>0247777777</so\_dien\_thoai>

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    </DS\_PHONG\_BAN>

    <DS\_QTLV>

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            <ngay\_ket\_thuc>2025-12-31</ngay\_ket\_thuc>

        </QTLV>

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            <ngay\_ket\_thuc>2025-12-31</ngay\_ket\_thuc>

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            <ngay\_ket\_thuc>2025-12-31</ngay\_ket\_thuc>

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            <ngay\_ket\_thuc>2025-12-31</ngay\_ket\_thuc>

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            <ngay\_bat\_dau>2020-06-01</ngay\_bat\_dau>

            <ngay\_ket\_thuc>2025-12-31</ngay\_ket\_thuc>

        </QTLV>

    </DS\_QTLV>

    <DS\_THAM\_GIA\_DU\_AN>

        <THAM\_GIA\_DU\_AN ma\_tgda="tgda1" ma\_nv\_ref\_tgda="nv1" ma\_da\_ref\_tgda="da1">

            <vai\_tro>Quan ly</vai\_tro>

            <so\_gio\_tham\_gia>120</so\_gio\_tham\_gia>

        </THAM\_GIA\_DU\_AN>

        <THAM\_GIA\_DU\_AN ma\_tgda="tgda2" ma\_nv\_ref\_tgda="nv2" ma\_da\_ref\_tgda="da1">

            <vai\_tro>Phan mem</vai\_tro>

            <so\_gio\_tham\_gia>200</so\_gio\_tham\_gia>

        </THAM\_GIA\_DU\_AN>

        <THAM\_GIA\_DU\_AN ma\_tgda="tgda3" ma\_nv\_ref\_tgda="nv3" ma\_da\_ref\_tgda="da2">

            <vai\_tro>Phat trien</vai\_tro>

            <so\_gio\_tham\_gia>150</so\_gio\_tham\_gia>

        </THAM\_GIA\_DU\_AN>

        <THAM\_GIA\_DU\_AN ma\_tgda="tgda4" ma\_nv\_ref\_tgda="nv4" ma\_da\_ref\_tgda="da3">

            <vai\_tro>Tester</vai\_tro>

            <so\_gio\_tham\_gia>80</so\_gio\_tham\_gia>

        </THAM\_GIA\_DU\_AN>

        <THAM\_GIA\_DU\_AN ma\_tgda="tgda5" ma\_nv\_ref\_tgda="nv5" ma\_da\_ref\_tgda="da4">

            <vai\_tro>Thiet ke</vai\_tro>

            <so\_gio\_tham\_gia>100</so\_gio\_tham\_gia>

        </THAM\_GIA\_DU\_AN>

        <THAM\_GIA\_DU\_AN ma\_tgda="tgda6" ma\_nv\_ref\_tgda="nv6" ma\_da\_ref\_tgda="da5">

            <vai\_tro>Tu van</vai\_tro>

            <so\_gio\_tham\_gia>60</so\_gio\_tham\_gia>

        </THAM\_GIA\_DU\_AN>

        <THAM\_GIA\_DU\_AN ma\_tgda="tgda7" ma\_nv\_ref\_tgda="nv7" ma\_da\_ref\_tgda="da7">

            <vai\_tro>Ke toan</vai\_tro>

            <so\_gio\_tham\_gia>90</so\_gio\_tham\_gia>

        </THAM\_GIA\_DU\_AN>

    </DS\_THAM\_GIA\_DU\_AN>

</HE\_THONG\_NHAN\_SU>

1. DTD

Source code DTD

<!ELEMENT HE\_THONG\_NHAN\_SU (DS\_BANG\_LUONG, DS\_CHAM\_CONG, DS\_CHUC\_VU, DS\_DU\_AN, DS\_NHAN\_VIEN, DS\_PHONG\_BAN, DS\_QTLV, DS\_THAM\_GIA\_DU\_AN)>

<!ELEMENT DS\_BANG\_LUONG (BANG\_LUONG+)>

<!ELEMENT BANG\_LUONG (thang, nam, luong\_co\_ban, phu\_cap, tien\_tang\_ca, tong\_luong)>

<!ATTLIST BANG\_LUONG

    ma\_bl ID #REQUIRED

    ma\_qtlv\_ref\_bl IDREF #REQUIRED

    ma\_cc\_ref\_bl IDREF #REQUIRED

>

<!ELEMENT thang (#PCDATA)>

<!ELEMENT nam (#PCDATA)>

<!ELEMENT luong\_co\_ban (#PCDATA)>

<!ELEMENT phu\_cap (#PCDATA)>

<!ELEMENT tien\_tang\_ca (#PCDATA)>

<!ELEMENT tong\_luong (#PCDATA)>

<!ELEMENT DS\_CHAM\_CONG (CHAM\_CONG+)>

<!ELEMENT CHAM\_CONG (thang, nam, so\_ngay\_cong, so\_gio\_tang\_ca)>

<!ATTLIST CHAM\_CONG

    ma\_cc ID #REQUIRED

    ma\_qtlv\_ref\_cc IDREF #REQUIRED

>

<!ELEMENT so\_ngay\_cong (#PCDATA)>

<!ELEMENT so\_gio\_tang\_ca (#PCDATA)>

<!ELEMENT DS\_CHUC\_VU (CHUC\_VU+)>

<!ELEMENT CHUC\_VU (ten\_chuc\_vu, luong\_co\_ban)>

<!ATTLIST CHUC\_VU ma\_cv ID #REQUIRED>

<!ELEMENT ten\_chuc\_vu (#PCDATA)>

<!ELEMENT DS\_DU\_AN (DU\_AN+)>

<!ELEMENT DU\_AN (ten\_du\_an, ngay\_bat\_dau, ngay\_ket\_thuc, mo\_ta)>

<!ATTLIST DU\_AN ma\_da ID #REQUIRED>

<!ELEMENT ten\_du\_an (#PCDATA)>

<!ELEMENT ngay\_bat\_dau (#PCDATA)>

<!ELEMENT ngay\_ket\_thuc (#PCDATA)>

<!ELEMENT mo\_ta (#PCDATA)>

<!ELEMENT DS\_NHAN\_VIEN (NHAN\_VIEN+)>

<!ELEMENT NHAN\_VIEN (ho\_ten, ngay\_sinh, gioi\_tinh, dia\_chi, so\_dien\_thoai, email)>

<!ATTLIST NHAN\_VIEN ma\_nv ID #REQUIRED>

<!ELEMENT ho\_ten (#PCDATA)>

<!ELEMENT ngay\_sinh (#PCDATA)>

<!ELEMENT gioi\_tinh (#PCDATA)>

<!ELEMENT dia\_chi (#PCDATA)>

<!ELEMENT so\_dien\_thoai (#PCDATA)>

<!ELEMENT email (#PCDATA)>

<!ELEMENT DS\_PHONG\_BAN (PHONG\_BAN+)>

<!ELEMENT PHONG\_BAN (ten\_phong\_ban, dia\_chi, so\_dien\_thoai)>

<!ATTLIST PHONG\_BAN ma\_pb ID #REQUIRED>

<!ELEMENT ten\_phong\_ban (#PCDATA)>

<!ELEMENT DS\_QTLV (QTLV+)>

<!ELEMENT QTLV (ngay\_bat\_dau, ngay\_ket\_thuc)>

<!ATTLIST QTLV

    ma\_qtlv ID #REQUIRED

    ma\_nv\_ref\_qtlv IDREF #REQUIRED

    ma\_pb\_ref\_qtlv IDREF #REQUIRED

    ma\_cv\_ref\_qtlv IDREF #REQUIRED

>

<!ELEMENT DS\_THAM\_GIA\_DU\_AN (THAM\_GIA\_DU\_AN+)>

<!ELEMENT THAM\_GIA\_DU\_AN (vai\_tro, so\_gio\_tham\_gia)>

<!ATTLIST THAM\_GIA\_DU\_AN

    ma\_tgda ID #REQUIRED

    ma\_nv\_ref\_tgda IDREF #REQUIRED

    ma\_da\_ref\_tgda IDREF #REQUIRED

>

<!ELEMENT vai\_tro (#PCDATA)>

<!ELEMENT so\_gio\_tham\_gia (#PCDATA)>

1. XSD

Source code XSD

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

<xs:schema

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

  targetNamespace="http://company.com/heThongNhanSu"

  xmlns="http://company.com/heThongNhanSu"

  elementFormDefault="qualified"

>

  <xs:element name="HE\_THONG\_NHAN\_SU">

    <xs:complexType>

      <xs:sequence>

        <xs:element ref="DS\_BANG\_LUONG" />

        <xs:element ref="DS\_CHAM\_CONG" />

        <xs:element ref="DS\_CHUC\_VU" />

        <xs:element ref="DS\_DU\_AN" />

        <xs:element ref="DS\_NHAN\_VIEN" />

        <xs:element ref="DS\_PHONG\_BAN" />

        <xs:element ref="DS\_QTLV" />

        <xs:element ref="DS\_THAM\_GIA\_DU\_AN" />

      </xs:sequence>

    </xs:complexType>

  </xs:element>

  <xs:element name="DS\_BANG\_LUONG">

    <xs:complexType>

      <xs:sequence>

        <xs:element name="BANG\_LUONG" type="BANG\_LUONG\_Type" maxOccurs="unbounded" />

      </xs:sequence>

    </xs:complexType>

  </xs:element>

  <xs:complexType name="BANG\_LUONG\_Type">

    <xs:sequence>

      <xs:element name="thang">

        <xs:simpleType>

          <xs:restriction base="xs:integer">

            <xs:minInclusive value="1" />

            <xs:maxInclusive value="12" />

          </xs:restriction>

        </xs:simpleType>

      </xs:element>

      <xs:element name="nam" type="xs:gYear" />

      <xs:element name="luong\_co\_ban">

        <xs:simpleType>

          <xs:restriction base="xs:decimal">

            <xs:minExclusive value="0" />

          </xs:restriction>

        </xs:simpleType>

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      <xs:element name="phu\_cap">

        <xs:simpleType>

          <xs:restriction base="xs:decimal">

            <xs:minInclusive value="0" />

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        </xs:simpleType>

      </xs:element>

      <xs:element name="tien\_tang\_ca">

        <xs:simpleType>

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        <xs:simpleType>

          <xs:restriction base="xs:decimal">

            <xs:minExclusive value="0" />

          </xs:restriction>

        </xs:simpleType>

      </xs:element>

    </xs:sequence>

    <xs:attribute name="ma\_bl" type="xs:ID" use="required" />

    <xs:attribute name="ma\_qtlv\_ref\_bl" type="xs:IDREF" use="required" />

    <xs:attribute name="ma\_cc\_ref\_bl" type="xs:IDREF" use="required" />

  </xs:complexType>

  <xs:element name="DS\_CHAM\_CONG">

    <xs:complexType>

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      </xs:sequence>

    </xs:complexType>

  </xs:element>

  <xs:complexType name="CHAM\_CONG\_Type">

    <xs:sequence>

      <xs:element name="thang">

        <xs:simpleType>

          <xs:restriction base="xs:integer">

            <xs:minInclusive value="1" />

            <xs:maxInclusive value="12" />

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        </xs:simpleType>

      </xs:element>

      <xs:element name="nam" type="xs:gYear" />

      <xs:element name="so\_ngay\_cong">

        <xs:simpleType>

          <xs:restriction base="xs:integer">

            <xs:minInclusive value="0" />

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      <xs:element name="so\_gio\_tang\_ca">

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            <xs:minInclusive value="0" />

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    </xs:sequence>

    <xs:attribute name="ma\_cc" type="xs:ID" use="required" />

    <xs:attribute name="ma\_qtlv\_ref\_cc" type="xs:IDREF" use="required" />

  </xs:complexType>

  <xs:element name="DS\_CHUC\_VU">

    <xs:complexType>

      <xs:sequence>

        <xs:element name="CHUC\_VU" type="CHUC\_VU\_Type" maxOccurs="unbounded" />

      </xs:sequence>

    </xs:complexType>

  </xs:element>

  <xs:complexType name="CHUC\_VU\_Type">

    <xs:sequence>

      <xs:element name="ten\_chuc\_vu">

        <xs:simpleType>

          <xs:restriction base="xs:string" />

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      </xs:element>

      <xs:element name="luong\_co\_ban">

        <xs:simpleType>

          <xs:restriction base="xs:decimal">

            <xs:minExclusive value="0" />

          </xs:restriction>

        </xs:simpleType>

      </xs:element>

    </xs:sequence>

    <xs:attribute name="ma\_cv" type="xs:ID" use="required" />

  </xs:complexType>

  <xs:element name="DS\_DU\_AN">

    <xs:complexType>

      <xs:sequence>

        <xs:element name="DU\_AN" type="DU\_AN\_Type" maxOccurs="unbounded" />

      </xs:sequence>

    </xs:complexType>

  </xs:element>

  <xs:complexType name="DU\_AN\_Type">

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      <xs:element name="ten\_du\_an">

        <xs:simpleType>

          <xs:restriction base="xs:string" />

        </xs:simpleType>

      </xs:element>

      <xs:element name="ngay\_bat\_dau" type="xs:date" />

      <xs:element name="ngay\_ket\_thuc" type="xs:date" />

      <xs:element name="mo\_ta" minOccurs="0">

        <xs:simpleType>

          <xs:restriction base="xs:string" />

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    </xs:sequence>

    <xs:attribute name="ma\_da" type="xs:ID" use="required" />

  </xs:complexType>

  <xs:element name="DS\_NHAN\_VIEN">

    <xs:complexType>

      <xs:sequence>

        <xs:element name="NHAN\_VIEN" type="NHAN\_VIEN\_Type" maxOccurs="unbounded" />

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  </xs:element>

  <xs:complexType name="NHAN\_VIEN\_Type">

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      <xs:element name="ho\_ten">

        <xs:simpleType>

          <xs:restriction base="xs:string" />

        </xs:simpleType>

      </xs:element>

      <xs:element name="ngay\_sinh" type="xs:date" />

      <xs:element name="gioi\_tinh">

        <xs:simpleType>

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            <xs:enumeration value="Nam" />

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          </xs:restriction>

        </xs:simpleType>

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      <xs:element name="dia\_chi">

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          <xs:restriction base="xs:string" />

        </xs:simpleType>

      </xs:element>

      <xs:element name="so\_dien\_thoai">

        <xs:simpleType>

          <xs:restriction base="xs:string">

            <xs:pattern value="(\+84|0)[0-9]{9,10}" />

          </xs:restriction>

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      </xs:element>

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        <xs:simpleType>

          <xs:restriction base="xs:string">

            <xs:pattern value="[a-zA-Z0-9.\_%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,}" />

          </xs:restriction>

        </xs:simpleType>

      </xs:element>

    </xs:sequence>

    <xs:attribute name="ma\_nv" type="xs:ID" use="required" />

  </xs:complexType>

  <xs:element name="DS\_PHONG\_BAN">

    <xs:complexType>

      <xs:sequence>

        <xs:element name="PHONG\_BAN" type="PHONG\_BAN\_Type" maxOccurs="unbounded" />

      </xs:sequence>

    </xs:complexType>

  </xs:element>

  <xs:complexType name="PHONG\_BAN\_Type">

    <xs:sequence>

      <xs:element name="ten\_phong\_ban">

        <xs:simpleType>

          <xs:restriction base="xs:string" />

        </xs:simpleType>

      </xs:element>

      <xs:element name="dia\_chi">

        <xs:simpleType>

          <xs:restriction base="xs:string" />

        </xs:simpleType>

      </xs:element>

      <xs:element name="so\_dien\_thoai">

        <xs:simpleType>

          <xs:restriction base="xs:string">

            <xs:pattern value="(\+84|0)[0-9]{9,10}" />

          </xs:restriction>

        </xs:simpleType>

      </xs:element>

    </xs:sequence>

    <xs:attribute name="ma\_pb" type="xs:ID" use="required" />

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  <xs:element name="DS\_QTLV">

    <xs:complexType>

      <xs:sequence>

        <xs:element name="QTLV" type="QTLV\_Type" maxOccurs="unbounded" />

      </xs:sequence>

    </xs:complexType>

  </xs:element>

  <xs:complexType name="QTLV\_Type">

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      <xs:element name="ngay\_bat\_dau" type="xs:date" />

      <xs:element name="ngay\_ket\_thuc" type="xs:date" />

    </xs:sequence>

    <xs:attribute name="ma\_qtlv" type="xs:ID" use="required" />

    <xs:attribute name="ma\_nv\_ref\_qtlv" type="xs:IDREF" use="required" />

    <xs:attribute name="ma\_pb\_ref\_qtlv" type="xs:IDREF" use="required" />

    <xs:attribute name="ma\_cv\_ref\_qtlv" type="xs:IDREF" use="required" />

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  <xs:element name="DS\_THAM\_GIA\_DU\_AN">

    <xs:complexType>

      <xs:sequence>

        <xs:element name="THAM\_GIA\_DU\_AN" type="THAM\_GIA\_DU\_AN\_Type" maxOccurs="unbounded" />

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    </xs:complexType>

  </xs:element>

  <xs:complexType name="THAM\_GIA\_DU\_AN\_Type">

    <xs:sequence>

      <xs:element name="vai\_tro">

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        </xs:simpleType>

      </xs:element>

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    <xs:attribute name="ma\_da\_ref\_tgda" type="xs:IDREF" use="required" />

  </xs:complexType>

</xs:schema>