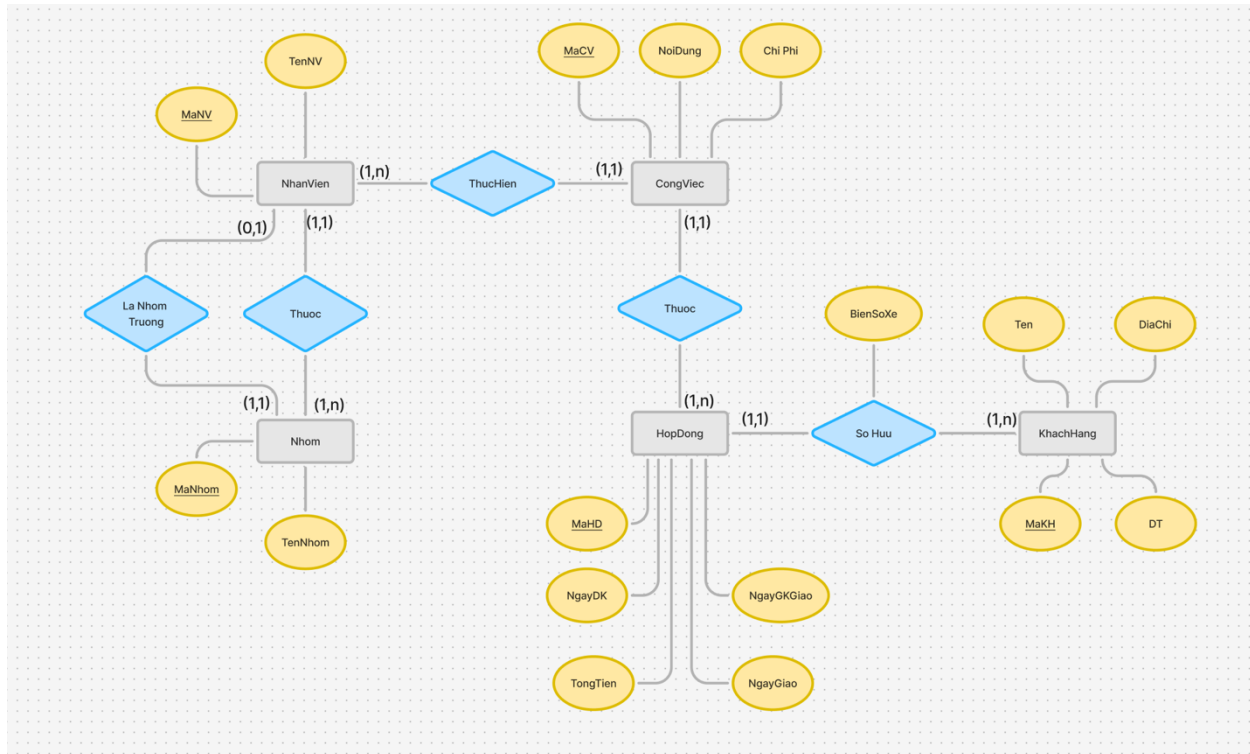# Bài tập cuối slide chương 2

Bài 3

ERD

RD

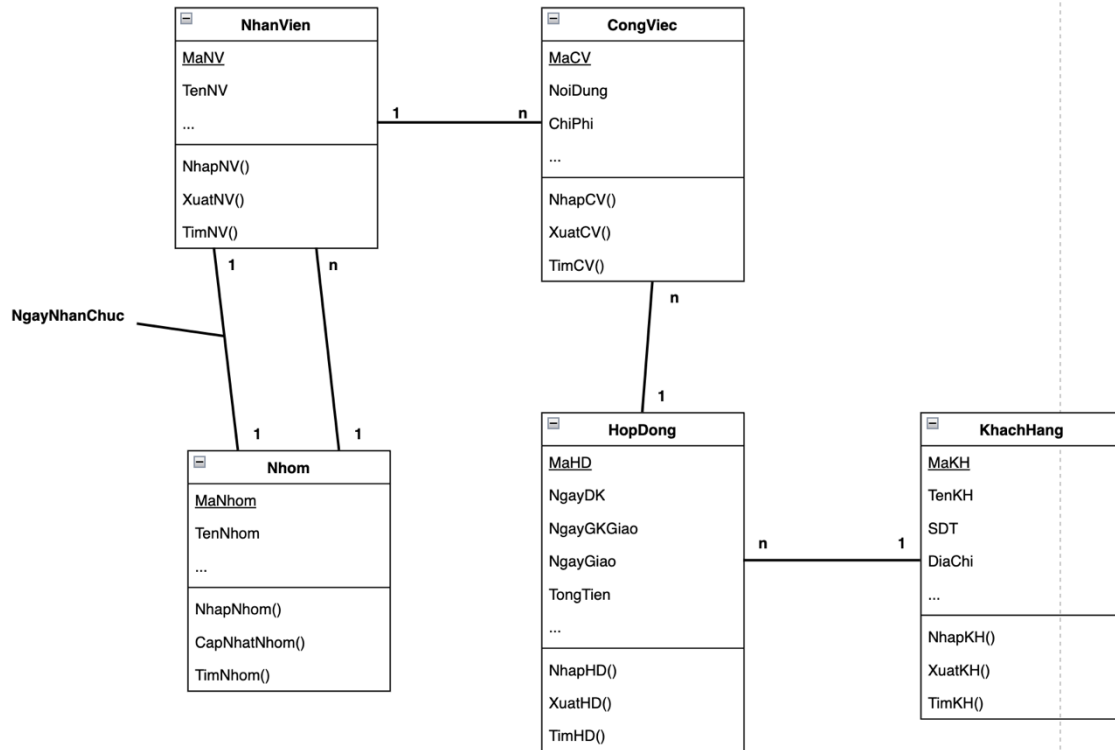NHANVIEN(<u>MANV</u>, HOTEN, PHAI, NGAYSINH, LUONG, **MANHOM, MANQL**)

NHOM(<u>MANHOM</u>, TENNHOM, **MATRUONGPHONG, NGAYNHANCHUC**)

CONGVIEC(<u>MACV</u>, NOIDUNG, CHIPHI, **MANV**)

HOPDONG(<u>MAHD</u>, NGAYDK, TONGTIEN, NGAYGKGIAO, NGAYGIAO, **MAKH, BIENSOXE**)

KHACHHANG(<u>MAKH</u>, HOTEN, DIACHI, DT)

CD

OOP
Class NhanVien {
MaNV char(5),
TenNV char(50),
…
NhapNV(),
XuatNV(),
TimNV()
}

Class Nhom {
MaNhom char(5),
TenNhom(50),
…
NhapNhom(),
CapNhatNhom(),
TimNhom()
}
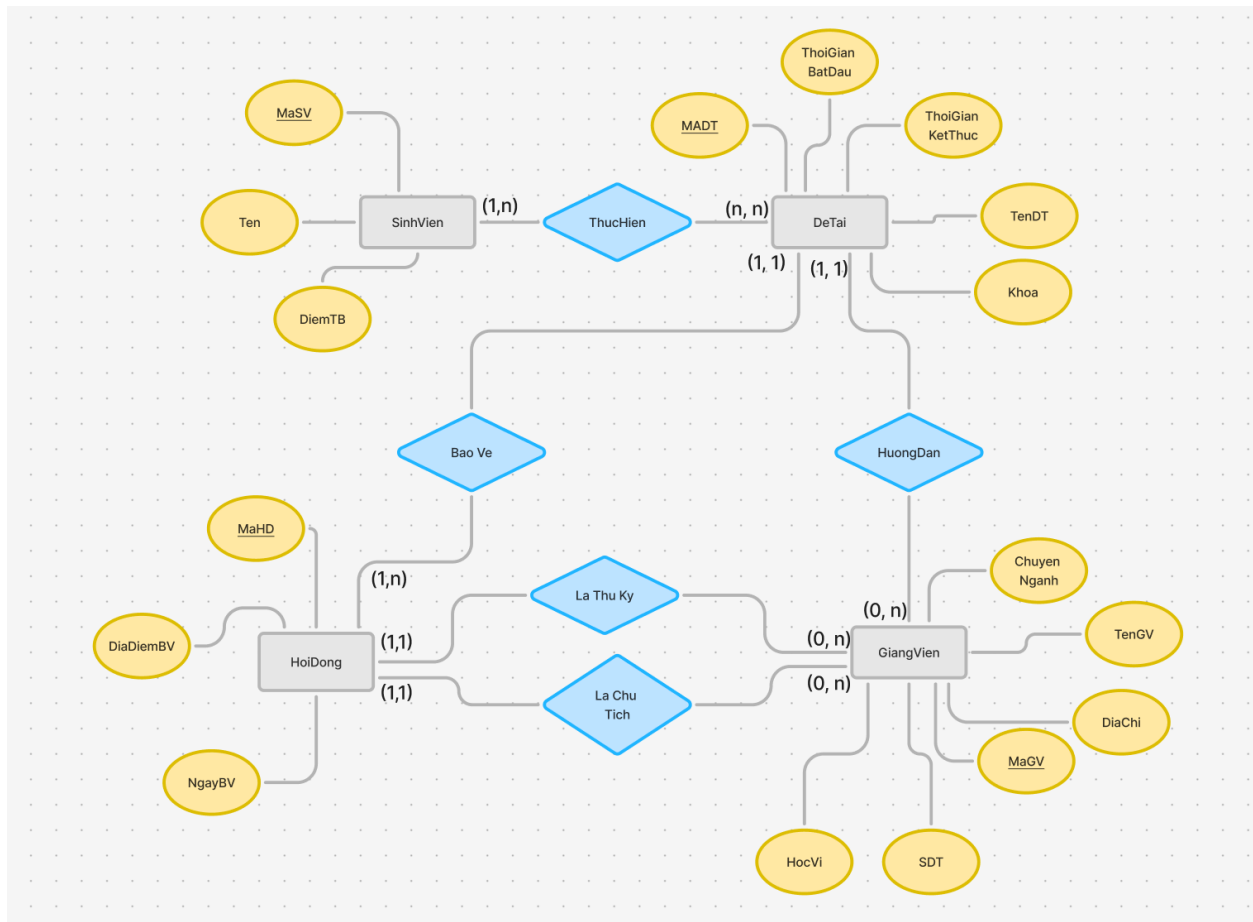Class CongViec {
MaCV char(5),
NoiDung char(255),
ChiPhi double,
…

```
NhapCV(),
XuatCV(),
TimCV()
}

Class HopDong {
MaHD char(5),
NgayDK date,
NgayGKGiao date,
NgayGiao date,
TongTien double,
…
NhapHD(),
XuatHD(),
TimHD()
}

Class KhachHang {
MaKH char(5),
TenKH char(50),
SDT char(20),
DiaChi char(255),
…
NhapKH(),
XuatKH(),
TimKH()
}
```
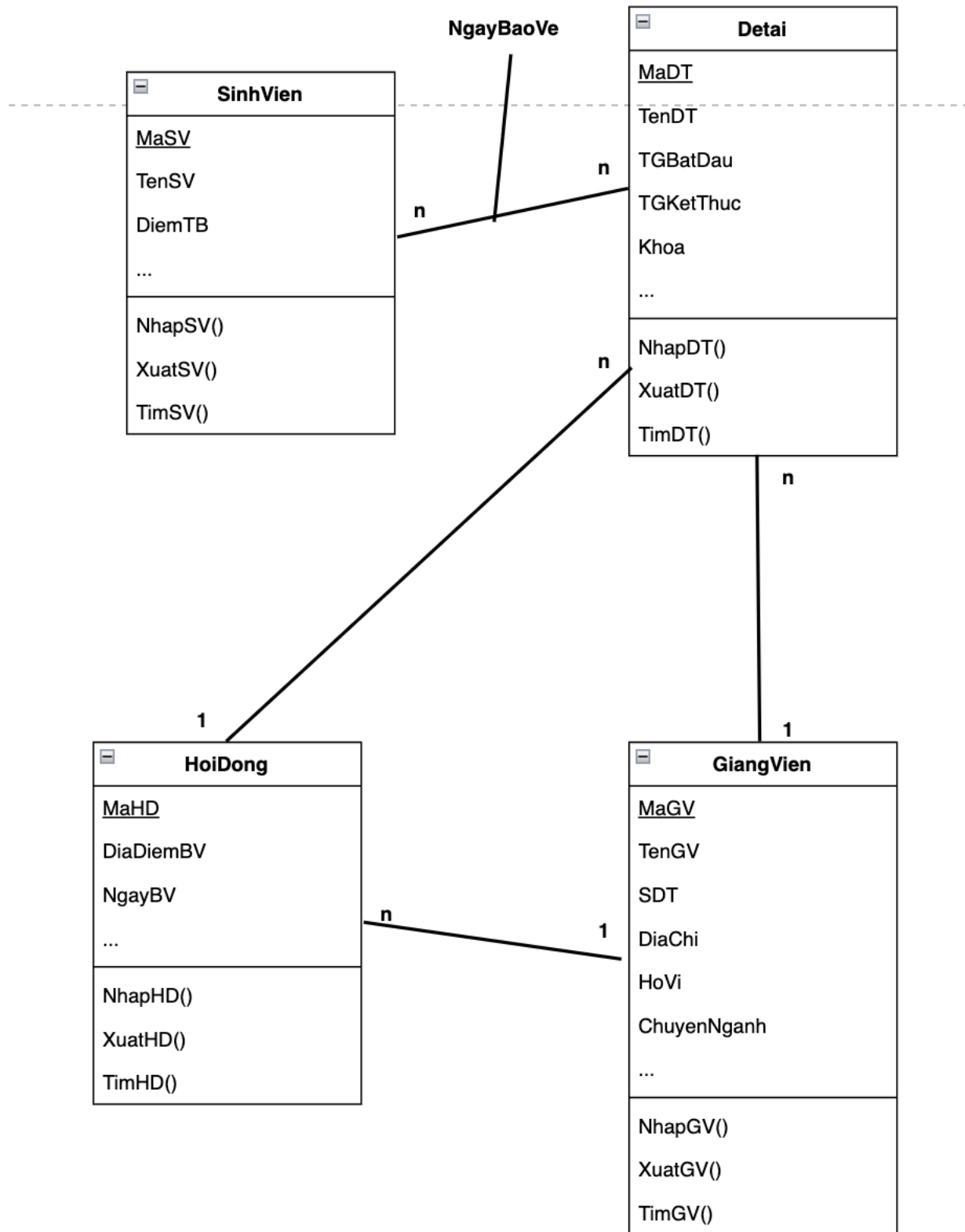
Bài 4
ERD

RD
SINHVIEN(<u>MASV</u>, TENSV, DIEMTB)
DETAI(<u>MADT</u>, TGBATDAU, TGKETTHUC, TENDT, KHOA, **MANV**, **MAHD**, **MAGV**)
GIANGVIEN(<u>MAGV</u>, TENGV, CHUYENNGANH, DIACHI, SDT, HOCVI)
HOIDONG(<u>MAHD</u>, DIADIEMBV, NGAYBV, **THUKY, CHUTICH**)

CD

OOP
Class SinhVien {
MaSV char(5),
TenSV char(50),
DiemTB double,
…
NhapSV(),
XuatSV(),
TimSV()
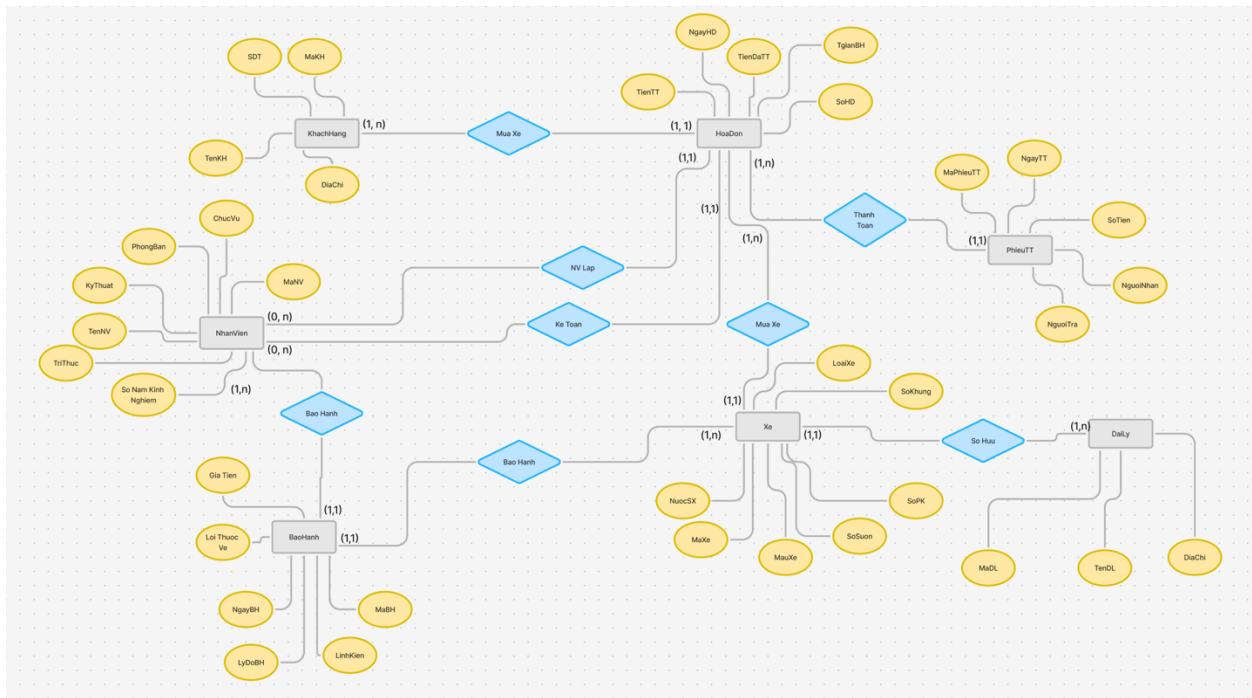}

Class DeTai {
MaDT char(5),
TenDT char(50)
TGBatDau date,
TGKetThuc date,
Khoa char(50),
…
NhapDT(),
CapNhatDT(),
TimDT()
}

Class GiangVien {
MaGV char(5),
TenGV char(50),
DiaChi char(255),
ChuyenNganh char(50),
SDT char(20),
HocVi char(50),
…
NhapGV(),
XuatGV(),
TimGV()
}

Class HoiDong {
MaHD char(5),
DiaDiem char(50),
NgayBV date,
…
NhapHD(),
CapNhatHD(),
TimHD()
}

Bài 5
ERD

RD

KHACHHANG(<u>MAKH</u>, TENKH, SDT, DIACHI)

HOADON(<u>SOHD</u>, TGBAOHANH, NGAYHD, TIENDATHANHTOAN, TGIANBAOHANH, MAKH, **NVLAP, KETOAN**)

PHIEUTHANHTOAN(<u>MAPHIEUTT</u>, NGATT, SOTIEN, **NGUOINHAN, NGUOITRA**)

NHANVIEN(<u>MANV</u>, TENNV, CHUCVU, PHONGBAN, KYTHUAT, TRITHUC, SONAMKN)

XE(<u>MAXE</u>, LOAIXE, SOKHUNG, SOSUON, SOPK, MAUXE, NUOCSX, **MADL**)

DAILY(<u>MADL</u>, TENDL, DIACHI)

BAOHANH(<u>MABH</u>, NGAYBH, LYDOBH, LINHKIEN, LOITHUOCVE, GIATIEN, **MAXE, MANV)**

CD

KhachHang

MaKH

TenKH

SDT

DiaCHi

...

NhapKH()

XuatKH()

TimKH()

HoaDon

MaHD

TGBaoHanh

TienDaThanhToan

TienThanhToan

NgayHD

...

NhapHD()

XuatHD()

TimHD()

PhieuThanhToan

MaPhieuTT

NgayTT

SoTien

NguoiNhan

NguoiTra

...

NhapPTT()

XuatPTT()

TimPTT()

NhanVien

MaNV

TenNV

ChucVu

PhongBan

KyThuat

TriThuc

SoNamKinhNghiem

...

NhapNV()

XuatNV()

TimNV()

BaoHanh

MaBH

LyDoBH

NgayBH

LinhKien

LoiThuocVe

GiaTien

...

NhapBH()

XuatBH()

TimBH()

Xe

MaXe

LoaiXe

SoKhung

SoPK

SoSuon

MauXe(color)

NuocSX

...

NhapXe()

XuatXe()

TimXe()

DaiLy

MaDL

TenDL

DiaChi

...

NhapDL()

XuatDL()

TimDL()

OOP

```
Class KhachHang {
MaKH char(5),
TenKH char(50),
SDT char(20),
DiaChi char(255),
…
NhapKH(),
XuatKH(),
TimKH()
}

Class HoaDon {
MaHD char(5),
```

```
TGBaoHanh date,
TienDaThanhToan date,
TienThanhToan date,
NgayHD date,
…
NhapHD(),
XuatHD(),
TimHD()
}

Class PhieuThanhToan {
MaPhieuTT char(5),
NgayTT date,
SoTien double,
NguoiNhan char(50),
NguoiTra char(50),
…
NhapPTT(),
XuatPTT(),
TimPTT()
}

Class NhanVien {
MaNV char(5),
TenNV char(50),
ChucVu char(50),
PhongBan char(50),
KyThuat char(50),
TriThuc char(50),
SoNamKinhNghiem double,
…
NhapNV(),
XuatNV(),
TimNV()
}

Class BaoHanh {
MaBH char(5),
LyDoBH char(255),
NgayBH date,
LinhKien char(50),
LoiThuocVe char(50),
GiaTien double,
…
NgayBH(),
XuatBH(),
```

```
TimBH()
}

Class Xe {
MaXe char(5),
LoaiXe char(50),
SoKhung char(50),
SoPK char(50),
SoSuon char(50),
MauXe char(50),
NuocSX char(50),
…
NhapXe(),
XuatXe(),
TimXe()
}

Class DaiLy {
MaDL char(5),
TenDL char(50),
DiaChi char(50),
…
NhapDL(),
XuatDL(),
TimDL()
}
```