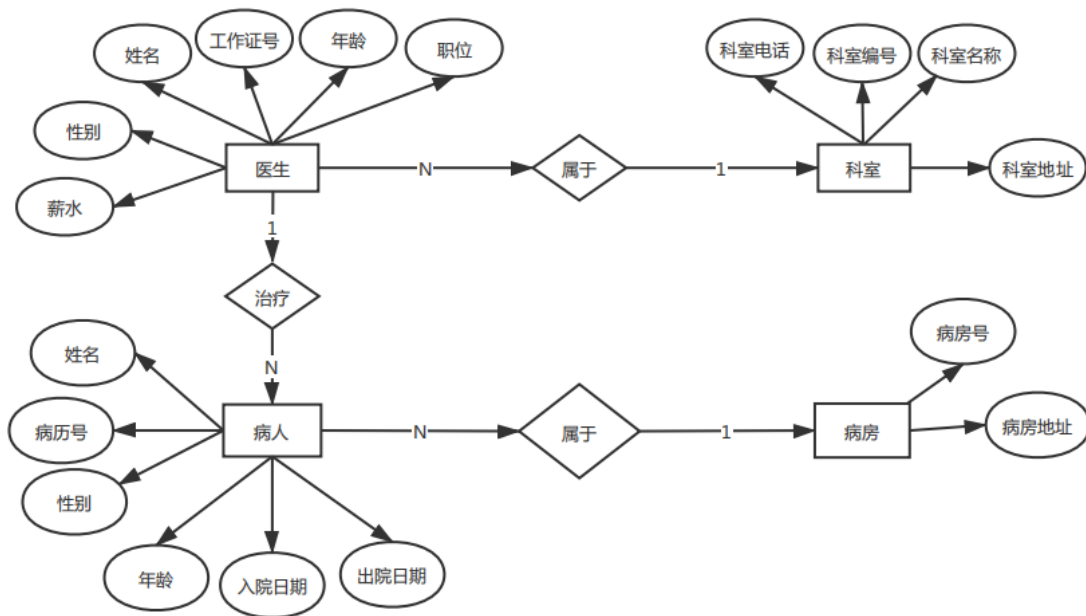


# 系统功能

- 1、实体：医生信息表、科室信息表、病房信息表、病人信息表
- 2、功能：医生、病人的查询、删除和修改功能；统计同一科室的医生；
- 3、实体之间的关系：



4、

医生：医生id，工作证号，年龄，职位，姓名，性别，薪水，科室编号

科室：科室id，科室编号，科室电话，科室名称，科室地址

病人：病人id，病历号，性别，年龄，姓名，入院日期，出院日期，医生id，病房号

病房：病房号，病房地址

对应的候选码：

医生：([医生id],[工作证号],[姓名，性别，职位，科室编号]，[姓名，科室编号，薪水])

科室：([科室id],[科室编号],[科室电话],[科室地址],[科室名称])

病人：([病人id],[病历号],[姓名，年龄，医生id，入院日期，性别，出院日期，病房号])

病房：([病房号],[病房地址])

对应的外码：

医生：科室编号

科室：无外码

病人：医生id，病房号

病房：无外码

数据库建表语句：

```

CREATE DATABASE `hospital` CHARACTER SET utf8 COLLATE utf8_general_ci;

SET NAMES utf8mb4;
SET FOREIGN_KEY_CHECKS = 0;

DROP TABLE IF EXISTS `doctor`;
CREATE TABLE `doctor` (
  `id` int(11) NOT NULL AUTO_INCREMENT COMMENT '医生id',
  `idcard` int(11) NULL DEFAULT NULL COMMENT '工作证号',
  `name` varchar(255) CHARACTER SET utf8 COLLATE utf8_general_ci NULL DEFAULT NULL COMMENT '姓名',
  `age` int(11) NULL DEFAULT NULL COMMENT '年龄',
  `gender` varchar(255) CHARACTER SET utf8 COLLATE utf8_general_ci NULL DEFAULT NULL COMMENT '性别',
  `rank` varchar(255) CHARACTER SET utf8 COLLATE utf8_general_ci NULL DEFAULT NULL COMMENT '职位',
  `salary` varchar(255) CHARACTER SET utf8 COLLATE utf8_general_ci NULL DEFAULT NULL COMMENT '薪水',
  `ksnum` int(11) NULL DEFAULT NULL COMMENT '科室编号',
  PRIMARY KEY (`id`) USING BTREE,
  INDEX `科室编号` (`ksnum`) USING BTREE,
  CONSTRAINT `科室编号` FOREIGN KEY (`ksnum`) REFERENCES `keshi` (`ksnum`) ON DELETE CASCADE ON UPDATE CASCADE
) ENGINE = InnoDB CHARACTER SET = utf8 COLLATE = utf8_general_ci ROW_FORMAT = Dynamic;

DROP TABLE IF EXISTS `door`;
CREATE TABLE `door` (
  `id` int(11) NOT NULL AUTO_INCREMENT COMMENT '病房id',
  `roomnum` int(11) NULL DEFAULT NULL COMMENT '病房号',
  `address` varchar(255) CHARACTER SET utf8 COLLATE utf8_general_ci NULL DEFAULT NULL COMMENT '病房地址',
  PRIMARY KEY (`id`) USING BTREE
) ENGINE = InnoDB CHARACTER SET = utf8 COLLATE = utf8_general_ci ROW_FORMAT = Dynamic;

DROP TABLE IF EXISTS `keshi`;
CREATE TABLE `keshi` (
  `id` int(11) NOT NULL AUTO_INCREMENT COMMENT '科室id',
  `ksnum` int(11) NOT NULL COMMENT '科室编号',
  `telephone` varchar(255) CHARACTER SET utf8 COLLATE utf8_general_ci NULL DEFAULT NULL COMMENT '科室电话',
  `name` varchar(255) CHARACTER SET utf8 COLLATE utf8_general_ci NULL DEFAULT NULL COMMENT '科室名称',
  `address` varchar(255) CHARACTER SET utf8 COLLATE utf8_general_ci NULL DEFAULT NULL COMMENT '科室地址',
  PRIMARY KEY (`id`) USING BTREE,
  INDEX `ksnum` (`ksnum`) USING BTREE
) ENGINE = InnoDB CHARACTER SET = utf8 COLLATE = utf8_general_ci ROW_FORMAT = Dynamic;

DROP TABLE IF EXISTS `patient`;
CREATE TABLE `patient` (
  `id` int(11) NOT NULL AUTO_INCREMENT COMMENT '病人id',

```

```

`record` varchar(255) CHARACTER SET utf8 COLLATE utf8_general_ci NULL DEFAULT
NULL COMMENT '病历号',
`name` varchar(255) CHARACTER SET utf8 COLLATE utf8_general_ci NULL DEFAULT
NULL COMMENT '病人姓名',
`gender` varchar(255) CHARACTER SET utf8 COLLATE utf8_general_ci NULL DEFAULT
NULL COMMENT '性别',
`age` int(11) NULL DEFAULT NULL COMMENT '年龄',
`inhos_date` datetime(0) NULL DEFAULT NULL ON UPDATE CURRENT_TIMESTAMP(0)
COMMENT '住院时间',
`outhos_date` datetime(0) NULL DEFAULT NULL ON UPDATE CURRENT_TIMESTAMP(0)
COMMENT '出院时间',
`doctorid` int(11) NOT NULL COMMENT '医生id',
`doorid` int(11) NOT NULL COMMENT '病房id',
PRIMARY KEY (`id`) USING BTREE,
INDEX `医生id` (`doctorid`) USING BTREE,
INDEX `病房id` (`doorid`) USING BTREE,
CONSTRAINT `医生id` FOREIGN KEY (`doctorid`) REFERENCES `doctor` (`id`) ON
DELETE CASCADE ON UPDATE CASCADE,
CONSTRAINT `病房id` FOREIGN KEY (`doorid`) REFERENCES `door` (`id`) ON DELETE
CASCADE ON UPDATE CASCADE
) ENGINE = InnoDB CHARACTER SET = utf8 COLLATE = utf8_general_ci ROW_FORMAT =
Dynamic;

SET FOREIGN_KEY_CHECKS = 1;

```

5、

(1)

```

select a.`name`,a.idcard from doctor a,keshi b where b.`name` = '口腔科' AND
a.ksnum = b.ksnum;

```

(2)

```

select AVG(a.salary) as avg_salary from doctor a,keshi b where b.`name` = '皮肤
科' AND a.ksnum = b.ksnum;

```

(3)

```

select a.`name`,a.rank from doctor a where (a.salary > (SELECT AVG(b.salary)
from doctor b,keshi c where b.ksnum = c.ksnum and c.name = '口腔科'));

```

(4)

```

INSERT INTO patient(`record`,`name`,`gender`,`age`,`inhos_date`) VALUES
('201907121290','李明','男',20,'2019-07-12');

```

(5)

```

UPDATE patient SET age='21' WHERE record = '201907121290';

```

(6)

```

DELETE FROM patient WHERE record = '201907121290';

```

