**DBMS Project Tables**

1. Create new database for patients network.

*drop schema if exists sampledb;*

*create schema if not exists sampledb;*

1. Create Patients table with the primary key as Pid.

*CREATE TABLE `sampledb`.`patients` (*

*`pid` INT(3) ZEROFILL NOT NULL AUTO\_INCREMENT COMMENT '',*

*`fname` VARCHAR(45) NOT NULL COMMENT '',*

*`lname` VARCHAR(45) NOT NULL COMMENT '',*

*`gender` VARCHAR(1) NOT NULL COMMENT '',*

*`dob` DATE NOT NULL COMMENT '',*

*`email` VARCHAR(45) NOT NULL COMMENT '',*

*`password` CHAR(32) NOT NULL COMMENT '',*

*PRIMARY KEY (`pid`) COMMENT '',*

*UNIQUE INDEX `email\_UNIQUE` (`email` ASC) COMMENT '');*

*alter table `sampledb`.`patients` auto\_increment=001;*

1. Create Symptom table with sid as primary key.

*CREATE TABLE `sampledb`.`symptoms` (*

*`sid` INT NOT NULL AUTO\_INCREMENT COMMENT '',*

*`sname` VARCHAR(45) NOT NULL COMMENT '',*

*`sdescription` VARCHAR(100) NULL COMMENT '',*

*PRIMARY KEY (`sid`) COMMENT ''*

*);*

1. Creating conditions table with primary key cid.

*CREATE TABLE `sampledb`.`conditions` (*

*`cid` INT NOT NULL AUTO\_INCREMENT COMMENT '',*

*`cname` VARCHAR(45) NOT NULL COMMENT '',*

*`cdescription` VARCHAR(100) NULL COMMENT '',*

*PRIMARY KEY (`cid`) COMMENT ''*

*);*

1. Pat\_conditions table is relation between conditions and patients table.

*CREATE TABLE `sampledb`.`pat\_conditions` (*

*`cid` int(11) NOT NULL,*

*`atime` datetime NOT NULL,*

*`dtime` datetime DEFAULT NULL,*

*`pid` int(3) unsigned zerofill NOT NULL,*

*`insert\_time` datetime DEFAULT NULL,*

*`update\_time` datetime DEFAULT NULL,*

*PRIMARY KEY (`cid`,`atime`,`pid`),*

*KEY `pid2` (`pid`),*

*CONSTRAINT `cid2` FOREIGN KEY (`cid`) REFERENCES `sampledb`.`conditions` (`cid`) ON DELETE CASCADE ON UPDATE NO ACTION,*

*CONSTRAINT `pid2` FOREIGN KEY (`pid`) REFERENCES `sampledb`.`patients` (`pid`) ON DELETE CASCADE ON UPDATE NO ACTION);*

1. Pat\_Symptoms table is having sid and pid as foreign keys. It is relationship between symptoms and patients table.

*CREATE TABLE `sampledb`.`pat\_symptoms` (*

*`sid` int(11) NOT NULL,*

*`atime` datetime NOT NULL,*

*`dtime` datetime DEFAULT NULL,*

*`pid` int(3) unsigned zerofill NOT NULL,*

*`insert\_time` datetime DEFAULT NULL,*

*`update\_time` datetime DEFAULT NULL,*

*PRIMARY KEY (`sid`,`atime`,`pid`),*

*KEY `pid1` (`pid`),*

*CONSTRAINT `pid1` FOREIGN KEY (`pid`) REFERENCES `sampledb`.`patients` (`pid`) ON DELETE CASCADE ON UPDATE NO ACTION,*

*CONSTRAINT `sid1` FOREIGN KEY (`sid`) REFERENCES `sampledb`.`symptoms` (`sid`) ON DELETE CASCADE ON UPDATE NO ACTION );*

1. Message table is to send message from one patients to other. Mid is the primary key.

*CREATE TABLE `sampledb`.`message` (*

*`mid` INT NOT NULL AUTO\_INCREMENT COMMENT '',*

*`senderid` INT(3) ZEROFILL NOT NULL COMMENT '',*

*`recvid` INT(3) ZEROFILL NOT NULL COMMENT '',*

*`stime` DATETIME NOT NULL COMMENT '',*

*`subject` VARCHAR(400) NULL COMMENT '',*

*`content` VARCHAR(1000) NULL COMMENT '',*

*PRIMARY KEY (`mid`) COMMENT '',*

*INDEX `sendid\_idx` (`senderid` ASC) COMMENT '',*

*INDEX `recvid\_idx` (`recvid` ASC) COMMENT '',*

*CONSTRAINT `sendid`*

*FOREIGN KEY (`senderid`)*

*REFERENCES `sampledb`.`patients` (`pid`)*

*ON DELETE CASCADE*

*ON UPDATE NO ACTION,*

*CONSTRAINT `recvid`*

*FOREIGN KEY (`recvid`)*

*REFERENCES `sampledb`.`patients` (`pid`)*

*ON DELETE CASCADE*

*ON UPDATE NO ACTION);*

1. Treatment table with list of treatments. Tid is the primary key.

*CREATE TABLE `sampledb`.`treatment` (*

*`tid` INT NOT NULL AUTO\_INCREMENT COMMENT '',*

*`tname` VARCHAR(45) NOT NULL COMMENT '',*

*`tdescription` VARCHAR(100) NULL COMMENT '',*

*PRIMARY KEY (`tid`) COMMENT '');*

1. Pat\_treatment is relation between patient and treatment tables.

*CREATE TABLE `sampledb`.`pat\_treatment` (*

*`tid` int(11) NOT NULL,*

*`atime` datetime NOT NULL,*

*`dtime` datetime DEFAULT NULL,*

*`pid` int(3) unsigned zerofill NOT NULL,*

*`insert\_time` datetime DEFAULT NULL,*

*`update\_time` datetime DEFAULT NULL,*

*PRIMARY KEY (`tid`,`atime`,`pid`),*

*KEY `pid3` (`pid`),*

*CONSTRAINT `pid3` FOREIGN KEY (`pid`) REFERENCES `sampledb`.`patients` (`pid`) ON DELETE CASCADE ON UPDATE NO ACTION,*

*CONSTRAINT `tid3` FOREIGN KEY (`tid`) REFERENCES `sampledb`.`treatment` (`tid`) ON DELETE CASCADE ON UPDATE NO ACTION);*

Here an assertion came for each of these tables pat\_symptoms, pat\_conditions and pat\_treatments. A patient shouldn’t have the same symptom when dtime (Disappear time is null). These assertions can be taken care at GUI implementation. We check dtime and then insert the data.