Login (Uid, password) {

u = UserFind (Uid);

valid = (u! = null);

if (!valid) {

msg("Your account doesn't exist");

} else {

valid2 = (u.getPassword() == password);

if (valid2) {

u.setIsLogin(true);

u.setLastAction (getCurrentTime());

type = UserGetUserType(Uid);

return type;

} else {

msg("your password is incorrect");

}

}

}

Logout(Uid) {

u = UserFind(Uid);

u.setIsLogin(false);

msg("successful!");

}

Kickout (time) {

UsersVector = UserFindAll();

for(int i = 0 ; i < UsersVector.size(); i++){

u = UsersVector.get(i);

status = (time - u.getLastAction() > 15 min);

if (status == true) {

u.setIsLogin(false);

}

}

Reserve (Uid, Sid) {

u = UserFind (Uid);

u.setLastAction (getCurrentTime());

s = ReserveFind(Sid);

valid = (s == null);

if (valid) {

reserveStatus = ReserveAdd(Uid,Sid);

if(reserveStatus)

msg ("Successful");

else

msg ("Unsuccessful");

} else

msg ("This time is full!");

}

Cancel (Uid, Sid) {

u = UserFind(Uid);

u.setLastAction(getCurrentTime());

scheduleRecord = ScheduleFind(Sid);

time = (scheduleRecord.getDay()- getCurrentTime() > 1 Day);

if (time == true) {

result = ReserveDelete(Sid);

if (result == true)

msg ("Cancelation Successful");

else

msg ("Unsuccessful");

} else {

msg ("Request time out !");

}

Change (Uid, oldSid, newSid) {

u = UserFind(Uid);

u.setLastAction(getCurrentTime());

r = ReserveFind(oldSid);

r.setSid(newSid);

msg("Successful");

}

Pay (Pid, Did) {

u = UserFind(Pid);

u.setLastAction(getCurrentTime());

price = DoctorGetVisitPrice(Did);

bankBool = makeBankTransaction(price);

if (bankBool == true)

msg (“Successful”);

else

msg (“Unsuccessful”);

}

makeBankTransaction (amount) {

transacted = transact(amount);

valid = (amount == transacted);

return valid;

}

Observe (Pid, Did){

u = UserFind(Pid);

u.setLastAction(getCurrentTime());

scheduleTable = ScheduleShowTableByDoctorId(Did);

valid = (scheduleTable == null);

if(valid)

msg ("The doctor doesn't exist");

else

return scheduleTable;

}

}

RegisterDoctor (Uid, firstName, lastName, username, password,

email, visitPrice, expert) {

u = UserFindAdmin();

u.setLastAction(getCurrentTime());

result = UserInsert(Uid, firstName,

lastName, username,

password, email,

"doctor", true,

getCurrentDateTime);

if (result == true){

doctorStatus =

DoctorInsert(Uid, expert, visitPrice);

if (doctorStatus == true)

msg (“Added Successfully”);

else

msg (“Unsuccessful”);

}else

msg (“User has already exists”);

}

RegisterPatient (Uid, firstName, LastName, username, password,

email, age , height , weight){

u = UserFindAdmin();

u.setLastAction(getCurrentTime());

result = UserInsert(Uid, firstName, lastName ,

username, password, email ,

"patient" , true ,

getCurrentTime());

if(result == false)

msg ("this user had been added before");

else{

patientStatus =

PatientInsert(Uid, age, height , weight);

if(patientStatus)

msg ("Successful");

else

msg ("Unsuccessful");

}

}

ObservePlan (Uid) {

u = UserFind(Uid);

u.setLastAction(getCurrentTime());

reserveTable = getReserveTable();

return reserveTable;

}

CancelDay (Uid, day) {

u = UserFind(Uid);

u.setLastAction(getCurrentTime());

time = (getCurrentTime() – day >= 3 day);

if(time == true) {

patientsVector = ReserveFindAllPatient(Uid);

sendEmailTo(patientsVector);

reserveStatus = ReserveDelete(Uid);

scheduleStatus = ScheduleDelete(Uid,day);

if(reserveSatatus && scheduleStatus)

msg ("Successful");

else

msg ("Unsuccessful");

}

else

msg ("You can't cancel this day");

}

ObservePatient (Uid) {

u = UserFind(Uid);

u.setLastAction(getCurrentTime());

reserveTable = getReserveTableByDoctorID(Uid);

return reserveTable;

}

TimeAnnounce (Uid, day, startTime, endTime) {

u = UserFind(Uid);

u.setLastAction(getCurrentTime());

scheduleStatus =

ScheduleInsert(Uid, date, startTime, endTime);

if(scheduleStatus == true)

msg ("Successful");

else

msg ("Unsuccessful");

}

}