hireLibrarian(ma\_id,l\_id,fname,lname,password,salary,hoursOfWork ){

manager = User.find(ma\_id);

if(manager != null){

manager.setLastActivity(getCurrentDateTime());

result = Librarian.insert(l\_id,fname,lname,password,salary,hoursOfWork);

if(result == true)

return("UnSuccessful");

else

return("UnSuccessful");

}

else

return("UnSuccessful");

}

fireLibrarian(ma\_id , l\_id){

manager = User.find(ma\_id);

if(manager != null){

manager.setLastActivity(getCurrentDateTime());

librarian = User.find(l\_id);

if(librarian != null){

result = Librarian.delete(librarian);

if(result == true)

return("Successful");

else

return("UnSuccessful");

}

else

return("UnSuccessful");

}

else

return("UnSuccessful");

}

registerMember(l\_id,m\_id,fname,lname,password,age,phoneNumber){

librarian = User.find(l\_id);

if(librarian != null){

librarian.setLastActivity(getCurrentDateTime());

result = Member.insert(m\_id,fname,lname,password,age,phoneNumber);

if(result == true)

return("Successful");

else

return("UnSuccessful");

}

else

return("UnSuccessful");

}

addBook(l\_id,b\_id,title,author,publisher){

librarian = User.find(l\_id);

if(librarian != null){

librarian.setLastActivity(getCurrentDateTime());

result = Book.insert(b\_id,title,author,publisher);

if(result == true)

return ("Successful");

else

return ("UnSuccessful");

}

else

return ("UnSuccessful");

}

searchBook (title,m\_id){

member = User.find(m\_id);

if(member != null){

member.setLastActivity(getCurrentDateTime());

book = Book.find(title);

if(book != null)

return (book.b\_id);

else

return("UnSuccessful");

}

else

return("UnSuccessful");

}

returnBook (b\_id,m\_id) {

member = User.find(m\_id);

if(member != null){

member.setLastActivity(getCurrentDateTime());

borrowBook = Borrow.find(b\_id);

if(borrowBook != null){

result = Borrow.delete(borrowBook);

if(result == true)

return ("Successful");

else

return("UnSuccessful");

}

else

return("UnSuccessful");

}

else

return("UnSuccessful");

}

bookRequest(b\_id,m\_id) {

member = User.find(m\_id);

if(member != null){

member.setLastActivity(getCurrentDateTime());

book = Book.find(b\_id);

if(book != null){

from = getCurrentDateTime();

result = Borrow.insert(b\_id,m\_id,from);

if(result == true)

return("Successful");

else

return("UnSuccessful");

}

return("UnSuccessful");

}

return("UnSuccessful");

}

registerManager (ma\_id,fname,lname,password,income){

result = manager.insert(ma\_id,fname,lname,password,income);

if(result == true)

return("Successful");

else

return("UnSuccessful");

}

logout(u\_id){

u = User.find(u\_id);

if(u != null && u.isLogin){

u.isLogin = false;

boolean = User.update(u);

if(boolean == true)

return("Successful");

else

return("UnSuccessful";)

}

else

return("UnSuccessful");

}

login(u\_id,password){

u = User.find(u\_id);

if(u != null){

if(u.password = password){

u.isLogin = true;

u.setLastActivity(getCurrentDateTime());

boolean = User.update();

if(boolean == true){

type = User.getUserType(u\_id);

return type;

}

else

return("UnSuccessful");

}

return("UnSuccessful");

}

return("UnSuccessful");

}

kickout(){

u = User.findAll();

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

if(u(i).isLogin){

if(u(i).getLastActivity – getCurrentDateTime() > 2) {

u(i).isLogin = false;

boolean = User.update(u);

if(boolean == true)

return("Successful");

else

return("UnSuccessful";)

}

}

}

}